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1979

PROCEEDINGS

OF THE

Bristol Naturalists' Society

EDITED BY R. A. AVERY
ASSISTED BY A COMMITTEE

"Rerum cognoscere causas"—Virgil

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All matter for inclusion in the next issue of the *Proceedings* should be sent to:—

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DEPARTMENT OF ZOOLOGY,
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NOT LATER THAN FEB. 28.

Other instructions for authors appear on page 116.

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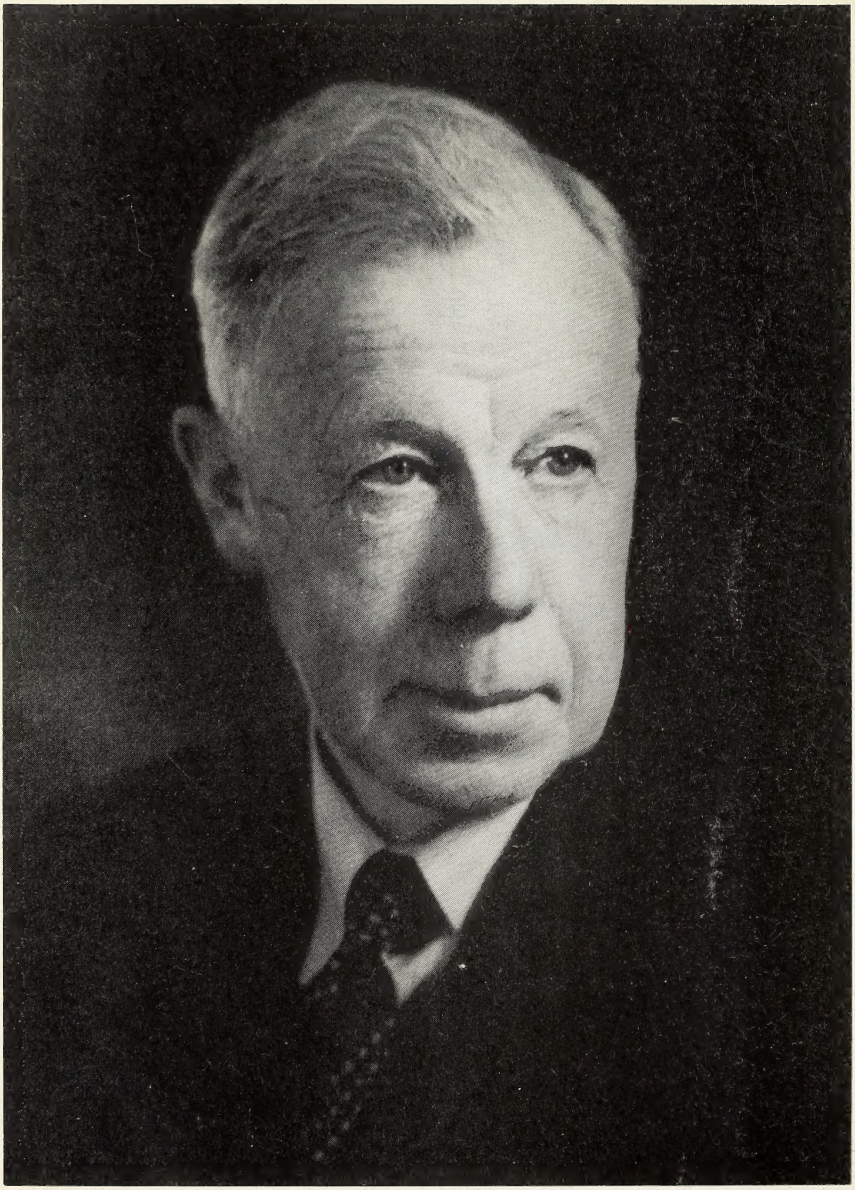

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PROCEEDINGS OF THE BRISTOL NATURALISTS' SOCIETY

VOLUME 39

1979

Frontispiece : Dr. F.S. Wallis,
President, 1933-34

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P. THOMSON, B.Sc.

Membership at the end of the year stood at 779, including 22 juniors.

At the annual Buffet Supper Mr. Robin Prytherech spoke on "Ascension Island."

The future of the junior section has been reviewed following a serious fall in numbers and support. The section has been suspended until a suitable leader is forthcoming. However, junior membership will be retained, and juniors will be welcome at all indoor meetings.

A working party was set up in 1978 to explore the possibility of the formation of a Trust for Nature Conservation in Avon. On its recommendation, the Joint Committee for Nature Conservation in Avon at the close of that year formally approved the formation of a Trust, after obtaining the approval of the Society for the Promotion of Nature Conservation, the Nature Conservancy Council, and the Somerset and Gloucestershire Trusts for Nature Conservation. The services of a team of graduates from the Special Temporary Employment Programme scheme were secured (a) to collate existing material on semi-natural habitats in Avon and to make any further surveys deemed necessary, with a view to deciding priorities for conservation purposes and the setting-up of nature reserves and interpretative sites (b) to undertake fund-raising and publicity drives essential to the formation of a Trust and (c) to set in motion the necessary legal preliminaries.

The Trust comes into being on 1.1.80, much of the initial work being completed by the end of 1979. Through the generous help of charitable bodies and local industries and businesses a substantial sum has been collected to start the Trust off with a balance in hand for payment of salaries and other expenses. The formal launching of the Trust is to be early May, 1980.

We record with regret the deaths of:

Mr. E. A. Bidwell

Dr. F. S. Wallace

At the Annual General Meeting in the Botany Department Herbarium on 22nd January, 1979 the following were elected:-

President: Dr. A.F. Devonshire; Secretary & Treasurer: Mr. A.L. Grenfell; Committee: Miss I.F. Gravestock, Dr. T.E.T. Bond, Mrs. N. Vaughan Davies, Mr. C.W. Hurfurt, Mr.P.J.M. Nethercott, Mrs. P.H. Royle, Mrs. T.B. Silcocks, Dr. M.C. Smith and Mr. C.M. Lovatt.

Miss Gravestock retired from the post of Secretary & Treasurer after a period of no less than 18 years.

The following winter meetings were held:-

January 22	Annual General Meeting and Members' Evening.
February 12	The Management of Woodland Nature Reserves, by Mr. J. Workman, OBE.
February 24	'Behind the Scenes' in the Bristol City Museum, led by Mrs. A. Hollowell.
March 17	Tropical & Sub-Tropical Plants at Bracken Hill, led by Dr. M.C. Smith.
March 26	Orchids of the West Country, by Mr. P.F. Hunt.
October 22	Plant Names, - English & Latin, by Dr. A.F. Devonshire.
November 26	Members' Evening, with transparencies.

The following field excursions took place, under the leadership of those shown:-

May 5	Knightshayes Gardens, Devon. Mrs. N. Vaughan Davies.
May 19	Hawkesbury Upton for woodland plants which included *Paris quadrifolia* and *Convallaria majalis*. Mrs. P.H. Royle.
June 1	Alien Hunt, Central Bristol. Mr. A.L. Grenfell.
June 30	Charterhouse for plants of the Roman lead mines. Mrs. T.B. Silcocks.
July 14	Oxford Botanic Garden. Mr. P.J.M. Nethercott.
July 25	Bristol Docks. Dr. A.F. Devonshire.
August 18	Keynsham - Hanham. A riverside walk during which *Catabrosa aquatica* and *Cuscuta europaea* were seen. Mr. C.W. Hurfurt.
September 1	Green Down & Watery Combe. Miss I.F. Gravestock.
September 23	Fungus Foray - Goblin Combe, joint meeting with Wrington Natural History Society. Dr. T.E.T. Bond.
September 29	Avonmouth Docks. Rare aliens included *Amaranthus spinosus*, *Iva xanthifolia* and *Modiola caroliniana*. Mr. A.L. Grenfell.

In addition to the above, evening meetings were held in the Avon Gorge on June 19, July 17 and August 14. Messrs. C.M. Lovatt & A.L. Grenfell.

A.L. Grenfell, Hon. Secretary.

REPORT OF ORNITHOLOGICAL SECTION, 1979

During the year 9 indoor meetings were held, with an average attendance of 50, and 28 Field Trips, though it proved possible to fill only one coach. The section participated in National Surveys including the overwintering Blackcap Survey, and the Nest Record Scheme. It attempted a trial survey of Magpies in Bristol, and Grey Wagtails in Avon, and completed a 3 year survey into Buntings in Avon. There were continuing surveys into the status of Shelduck, Kestrels in Bristol, and Birds in Gardens as well as a survey of the tidal Avon. A start was made on organising duck counts in North Avon, and the gull study group monitored local gull populations.

At the 55th AGM, held on January 24th, 1979, Mrs. J. Humphris was elected President, R.L. Bland was elected Secretary, and S.M. Taylor, Assistant Secretary. H. Rose was elected Treasurer. S. Hammacott, R. Chadwick, E. Harris and P. Farner all retired from the committee, and P. Chadwick, B. Gray and H.S. Walker were elected to it for the first time. Re-elected were P. Carter, W. Biggs, J. Burton and T. Evans.

Please note that the 1976 Ornithological Section Report refers to the 53rd AGM, which took place in 1977, and the 52nd AGM, at which R.G. Thomas was elected President for the first time, has been omitted from the record.

R.L. BLAND, Hon. Secretary.

REPORT OF MAMMAL SECTION, 1979

At the Annual General Meeting the following officers were elected:- President: Mr. R.A. Burberry; Joint Secretary/Treasurers: Mrs. C. Kitchen and Mr. M.A.R. Kitchen; Mammal Recorder: Mr. A.F. Jayne; Committee Members: Miss J. Haskins, Miss E.J. Lenton, Mr. J. Grant, Mr. M. Chapman.

6 indoor meetings were held:-

January 16:	AGM and Members' Evening.
February 13:	Amphibians: Mr. M. Linley.
March 13:	Mammal Workshop. Mr. Burberry.
October 9:	Small Mammals as Prey. Mr. A.F. Jayne.
November 9:	The Otter in England. Miss E.J. Lenton.
December 11:	Small Mammals in Arable Fields. Mr. P. Sayers.

The following field meetings were held:-

January 21:	Country Fox Spotting. Miss E. J. Lenton.
January 28:	Town Fox Spotting. Mr. M.A.R. Kitchen.
February 25:	Bottle Survey. Mr. A.F. Jayne.
March 18:	Dolebury Warren. Mr. M. Chapman.
April 22:	Silkwood. Mr. A.F. Jayne.
May 20:	Ashton Court Park. Mr. R. Surch.
June 17:	Early morning walk in Leigh Woods. Mr. R.A. Burberry.
July 1:	Wrington Hill and Goblin Coombe. Mr. G. Walker.
August 19:	Tickenham Ridge. Mr. M.A.R. Kitchen.
September 2:	Quantocks. Mr. R.A. Burberry.
October 7:	Deer Rut at Ashton Park. Mrs. C. Kitchen.
October 21:	Harvest Mouse Search. Mr. A.F. Jayne.
November 11:	Riverside Walk. Miss E.J. Lenton.
December 9:	Bottle Survey. Mr. W. Chapman.

The mammal recording scheme has continued with good participation from members. Although the section records amphibians and reptiles, the number of records of these animals received is generally always somewhat on the low side, possibly due to a lack of awareness by members of this aspect of the section's activities.

C. KITCHEN
M.A.R. KITCHEN Hon. Secretaries

REPORT OF GEOLOGICAL SECTION, 1979

The Annual General Meeting of the Section took place on 11th January, 1979, in the Geology Lecture Theatre, Queen's Building and the following were elected:-

President: Mr. V. Dennison; Vice-President: Mr. N. Hollingsworth; Secretary and Treasurer: Miss C.J. Mayle; Field Secretary: Dr. D. Hamilton;

Ex officio: Professor D.L. Dinely; President of the Student Geol. Section;

Members:- Mr. T. Harrison, Miss E. Pounder, Mr. P. Thompson, Mrs. G. Hamilton, Mr. A.E. Frey, Dr. A. B. Hawkins, Mr. A. Mattheison, Mr. J. Toller.

The winter programme included:-

January 11:	Annual General Meeting and Presidential address: The Holford Stream - a geomorophological oddity. Mr. V. Dennison.
February 15:	The North Sea Basin. Dr. S.C. Matthews.
March 10:	Visit to the Geology Section in the Bristol Museum. Conducted by the staff of the Museum.
March 15:	The Lower Mesozoic rocks of the West Country. Dr. A. Whittaker.
October 18:	Fossils and their environment. Dr. P. Hardy.
November 22:	Base of the Cambrian in China and Siberia. Dr. J. Cowie.

Field outings:-

April 22:	Volcanic rocks of the Weston-Super-Mare area (with W.E.G.A.). Dr. D.L. Speedyman.
May 9:	Building stones of the Clifton area. Dr. R.J.G. Savage. (Evening Walk).
July 8:	Blacknore to Redcliffe Bay. Mrs. Maureen Milton. Survey of Quarry at Goblin Coombe. (Morning).
July 15:	Minerals of the Bristol District (with W.E.G.A.). Mr. I.H. Ford and Mr. C.J. Alabaster.
September 23:	Crowcoombe to Kilve. Mr. V. Dennison.

Miss C.J. Mayle, Hon. Secretary.

REPORT OF THE LIBRARIAN, 1979

There are now 72 members registered as readers in the Society's Library. During the year, 132 visits were recorded, and 41 readers borrowed over 240 items. An Open Evening on May 15th attracted six new visitors.

Additions to the Library included 27 books and a number of back issues of journals. A subscription was taken out to the Entomologists' Gazette. We are grateful to all who have donated material, including Mrs. N. Vaughan-Davies and Mr. S.M. Taylor.

The members of the Library Committee have again provided valuable assistance. Mr. Taylor has continued the checking of the Ornithological Section. Mrs. Gray has boxed and labelled a number of journals. In particular I would like to thank Mr. Nethercott for assembling albums of the Society's Proceedings (1st Series) and a complete set of "Bristol Botany". He has also sorted all the back issues of the Proceedings, finding 20 parts completely out of print since 1874.

We acknowledge our gratitude to the Director of the City Museum and to the Librarian of the University of Bristol for providing us with accommodation and storage space.

JENNIFER SCHERR, Hon. Librarian.

ACCOUNT OF GENERAL MEETINGS, 1979

January 18th.	Presidential Address: "Sea Shells in Art & Architecture".
February 8th.	"A Year in the LIfe of a Deer" - speaker Mr. M. Hill.
March 8th.	"The Making of a Natural History Film" - speaker Mr. M. Rhodes.
October 4th.	"Ireland Adventures" by Mr. J. Eatough.
November 8th.	Members' Evening: "Natural History of Towns & Cities".
December 6th.	"Seeing thro' the Sea" by Dr. J. Lythgoe.

GENERAL FIELD MEETINGS, 1979

Fourteen field meetings were held, and were generally well attended; at four there were more than 50 members. Two, however, had to be cancelled through lack of support; one cancellation (in January) was due to the severe winter. A list of the meetings with leaders, and an indication of things seen is given below. A fuller account is kept in the records of the Field Committee. In the following list the leader is given first, followed by the area visited.

13 April	H.G. Hockey. Hornsbury Mill and Museum near Chard; Seaton and a tram-ride along the bank of the Axe, where herons and other water-birds were seen. Axmouth harbour.
25 April	Miss J. Cox. Afternoon walk in Leigh Woods. Trees and other plants.
13 May	H.G. Hockey. Wimbleball reservoir; Brendon Hills. A walk through the oakwoods surrounding the new reservoir. Waterfowl.
22 May	Mrs. V.J. Kenney. An afternoon walk from Bristol Castle to Evans Park. Plants.
5 June	R.M. Curber. College Park at Newton St. Loe. Evening. Trees and garden plants; a heronry and waterfowl.
23 June	Miss R.C. Lee. Brownsea Island. The island is covered with pines, with marshes and lagoons on the north, where waterfowl were seen. Signs of red squirrel were also seen.
7 July	Miss C. Groves. Cricket St. Thomas Wild Life Park for mammals and birds. Tintinhull for garden shrubs and trees.
11 July	Dr. A.F. Devonshire. Bristol Castle. An evening walk. Historic buildings and plants.
18 July	Miss C. Groves. Clevedon Court. The party visited the house and gardens.
1 August	Miss R.C. Lee. A walk along the Berkeley canal from Purton to Slimbridge. Water plants and birds.
7 August	Dr. A.F. Devonshire. A visit to the University Botanic Garden which has a fine collection of native and foreign plants.
11 August	Miss J. Cox. Kew Gardens. After visiting the Queen's Garden the party divided to see the rest of the gardens.
9 September	Mr. John Bingham (Worcester Field Club). Wyre Forest, near Beudley. An ancient forest, mainly oak.
27 October	Miss R.C. Lee. A walk at Heaven's Gate (near Longleat) for trees and fungi, and a visit to Stourhead Garden, which has a magnificent collection of trees.

A.F. DEVONSHIRE Hon. Field Secretary.

Accounts for the year ended 31 December 1979

1978		£	£
	Members' Subscriptions		
1486	Full members	1,731.00	
121	Full Members of the same household	154.75	
34	Corresponding Members	31.25	
20	Associates	24.00	
21	Juniors	20.25	
20	Affiliated Societies	28.25	1,989.50
1702			
1	Donations		5.50
105	Proceedings		
	Grants	45.00	
	Sales	110.26	155.26
9	Sale of journals and books		16.91
29	Field Committee : profit		30.57
15	Buffet Supper : Profit		12.50
79	Interest on deposit account		147.33
2	Interest from National Savings Bank		2.35
36	Interest on Bonds		36.00
21	Members contributions to the Harry Savory Illustrations Fund		30.75
-	Members' Contributions to the Conservation Appeal		36.00
1	Advertisement		-
2	Overpaid subscription		2.00
2196	Balance from last account		1,982.57
£4,198			£4,447.24

P. J. M. Nethercott
Hon. Treasurer
23rd April 1980.

1978		£	£
613	General Printing and Stationery	615.96	
432	Postages and telephone	401.35	1,017.31
805	Proceedings (1977)		890.00
86	Books	165.60	
67	Subscriptions for journals etc.	94.10	
10	Replacement of lost journals	4.76	
-	Binding	32.50	
10	Fire Insurance (Library)	9.57	
4	Library stationery	-	306.53
16	Contributions to Council for Nature, S.W.N.U. etc.		17.85
8	Expenses of general indoor meetings		12.96
165	Grants to Sections :		
	Botanical	10.00	
	Mammal	40.00	
	Ornithological	60.00	
	Geological	40.00	
	Entomological	25.00	175.00
-	Refund of overpaid subscriptions		4.00
	Balances to next account :		
88	Cash in bank, current account	149.41	
1382	Cash in bank, deposit account	1,329.38	
48	Deposit in National Savings Bank	50.30	
400	*£400 8½% & 9½% British Savings Bonds	400.00	
64	In hands of Field Committee	94.50	2,023.59
£4,198			£4,447.24

*Including the Harry Savory Illustrations Fund of £188.69.

Notes: (1) These accounts do not record balances held by sectional treasurers and the Ornithological Section Special Fund of £155.86

(2) The cost of the 1978 Proceedings, amount not known, is an outstanding liability.

Audited and found correct.
T. B. Silcocks
26 May 1980.

Dr. F. S. WALLIS

1895-1979

Dr. Frederick Stretton Wallis, past President of the Society, former Director of the Bristol City Museum and Lecturer in Geology at Bristol University, died at the age of 84 on 9 March 1979.

Dr. Wallis was very much a Bristolian. He was born in the city and schooled at Fairfield Secondary School (as it was then known). From there in 1912 he entered Bristol University to read Geology. His studies were interrupted by the First World War; he joined the Royal Flying Corps and saw service in France and the Middle East. After the war he returned to his studies and graduated with First Class Honours in 1920. To this he added an M.Sc. in 1921, Ph.D. in 1923 and D.Sc. in 1930.

In 1920 Wallis joined the staff of Bristol City Museum as Assistant curator in Geology, rising through the posts of Curator and Deputy Director until in 1945 he was appointed Director of the Museum. He also kept up his interests and contacts with the University; he was appointed Assistant Lecturer in Geology in 1922, and later carried the title of Special Lecturer in Sedimentary Petrology. On his retirement from the University and the City Museum in 1960 he became Curator of the Torquay Natural History Museum, and later Curator of the Wells Museum.

Dr. Wallis was a very active member of the Society for almost 60 years. He joined in 1920 and almost immediately became its Secretary and Treasurer of the Geology section. He retained the secretaryship until 1933 when he was elected the Society's President, coupling with it secretaryship of the Geology Section and presidency of the Field Section. He was a Society Vice-President in 1935, president of the Geology Section in 1944 and 1945, and was elected an Honorary Member in 1960. At his death he was the Society's senior member. This list of offices gives only a hint of the devoted service Dr. Wallis gave to the Society.

He was a key figure in achieving the affiliation of the Bristol Field Club with the Society which has operated within the Society since 1927 as the Field Section. He organised innumerable field excursions for the Society and gave many

lectures to the members. Dr. Wallis always had a great enthusiasm for communicating his geology, especially to the young. He found time from his Museum duties to give an annual course of lectures to the students on his special subject of sedimentology, a course which ran for almost 40 years. He also prosecuted his own research very actively, mainly in the Devonian and Carboniferous sediments. His D.Sc. was awarded for a series of papers on the petrology of the Old Red Sandstone, based largely on outcrops in the Bristol district. In this work Wallis was one of the first geologists to use heavy mineral analyses in the study of sediment origins. Some of the results of his researches appeared in nine papers in our Proceedings between 1922 and 1973. These include a paper on insects found in the local coalfields and his last a discussion on the use of Draycott dolomitic conglomerate as a building stone in Wells cathedral and Temple Meads Railway Station.

When Wallis became Director of the Museum in 1945, he inherited a building in which much of the geology collection had been destroyed by enemy bombing. His was a formidable task; to appoint staff, to renew the collections, to rehouse the specimens, to enthuse the public with displays, lectures and activities. Unhappily he was unable to persuade the City Council to provide a new building for the Museum, but in other ways his policies were to bear abundant fruit. He was instrumental in establishing the Museums School Service; by bringing children into contact with natural history in the museum and by taking the museum to the schools he wisely foresaw the importance and potential influence of early education in natural history. For many years he was a regular lecturer to the Workers Educational Association and he initiated a three year geology course in association with the Adult Education department of the University. This course aroused widespread interest and many members of the Society owe their enthusiasm for natural history to his lectures. It was from this course that in later years there arose the present Certificate Course in Geology. Wallis also arranged winter series of public lectures at the Museum and in his days these were usually devoted to natural history themes.

Archaeology was under his charge at the Museum, and Wallis brilliantly used his expertise in petrology to aid archaeology

in identifying the source of hand axes, so making a signal contribution to prehistoric archaeology. He was closely associated with the Association for the Preservation of Ancient Bristol, the Civic Society and the Broad Plains Mission. He was a very active member of the Museums Association and was ever enthusiastic about the importance of museums communicating with the public.

Dr. Wallis was a man of tireless activity. To meet with him always left an impression of total dedication, integrity and sincerity. He was an extremely able scholar and administrator and a great educator. With all this he was a very modest and unassuming man whose inherent kindness and sympathy for others were always evident. His philosophy of life is well expressed in his presidential address to the Society (Proceedings Vol.7, 419-23, 1933). Here we read of his deep concern to communicate the basic principles of science, to enable people to understand how science works, to stimulate them with the joys of discovery, to appreciate that science and the arts go hand in hand as twin elements of man's knowledge and culture. His philosophy, though fundamentally Baconian, is still applicable today. The words of J.R.Lowell ring true for Wallis -

> The wisest man could ask no more of Fate
> Than to be simple, modest, manly, true
> Safe from the many, honoured by the few.
> To widen knowledge and escape the praise,
> Wisely to teach, because more wise to learn,
> To toil for science, not to draw men's gaze,
> But for her love of self-denial stern.
> That such a man could spring from our decays
> Fans the soul's noblest faith until it burn.

We are privileged to have had Dr. Wallis among our number and are grateful for his long years of active service. To his widow and daughter we extend our sympathy.

R.J.G.SAVAGE

A V O N B I R D R E P O R T, 1 9 7 9

COMPILED BY THE EDITORIAL COMMITTEE,
B. N. S. ORNITHOLOGICAL SECTION

P. J. Chadwick, Chairman — H. R. Hammacott, Secretary
Mrs J. Humphris — S. M. Taylor
R. G. Thomas — J. D. R. Vernon
K. E. Vinicombe — G. Youdale

Address for submission of records:
P. J. Chadwick, 3 Hill Burn, Henleaze, Bristol.

EDITORS

We welcome K. E. Vinicombe and G. Youdale of Bristol Ornithological Club, who have joined the Committee and taken a full part in its work, to the great benefit of the Report. Mrs J. Humphris, a member ex officio as President of the Section, has also assumed a full share; this year G. Sweet was unable to do so, through pressure of other work, but he made his specialised knowledge available, as did G. E. Clothier on weather matters, and we record our gratitude to them.

THE YEAR

The third coldest January of the century, a long cold spring, a cool unsettled summer, a fine September and a generally mild and frequently very wet October to December.

The cold and snow of Christmas 1978 intensified during the first week of January, and continued until late in February with only two brief milder spells. Snow in Avon was neither very deep nor very extensive; more important was the prolonged cold. The published meteorological data for Filton show that, of the 61 days from December 30, 1978 to the end of February, the minimum grass temperature was below freezing on 53, which occurred in runs of 8, 6, 15, 5, 11 and 8 days; on 23 days in this period the grass minimum was -5°C or below. One consequence of the prolonged cold was the freezing over of much of Blagdon and Chew Valley reservoirs and the dispersal of many birds that normally winter there.

The details of the dispersal may be found in the systematic list, but we note here some highlights: the Great Crested Grebes at Chew Valley Lake (CVL) dispersed to Barrow Gurney and to Cheddar Res. (Somerset), where there were 115 on Jan. 5th. The Cormorants mainly went to Barrow Gurney too, though some scattered widely. The CVL Ruddy Duck started by following the exodus to Barrow, and over 160 were there on the 27th; in February they moved to Cheddar (206 on 25th) and some scattered much further afield, but they

returned in March, and reached a record total. Pochard and Tufted Duck also dispersed far and wide, as did Coot - there were only 255 at CVL and 240 at Cheddar in January, far below the usual numbers. Some gulls left, 1,000 Common moving to Cheddar and some 8,000 Black-headed joining the roost at St George's Wharf.

Unlike February 1978, when the cold and snow were largely localised to the south-west, the whole country was involved in the 1979 cold; indeed, over much of Europe it was the cruellest winter for many decades. Many birds moved westwards: in our area, large numbers of Wigeon were seen on the coast. At the New Grounds, Glos the Whitefronted Goose flock increased from 2,200 in Dec. 1978 to 5,100 on Jan. 11 - the largest for six years; when the grass froze they dispersed to feed each day, some to Bridgwater Bay, and many parties were seen coming and going. On Jan. 14 the Wildfowl Trust was host to a record 610 wild Bewick's Swans. Fieldfares and Redwings did not appear especially numerous, though 1,000 were seen at Abbots Leigh on Jan. 6, and flocks speedily stripped the berries from the hawthorns on Durdham Down, Bristol. There was a flock of some 500 Skylarks at St Georges Wharf in January, and Bramblings were noted more often and more plentifully than usual. Of rarer visitors, a Lapland Bunting at St Georges Wharf, and two more on the Somerset coast, may be mentioned. In Bristol City Docks, a Little, a Great Crested and a Slavonian Grebe were present at different times. A national influx of Red-necked Grebes in the middle two weeks of February led to reports from the New Grounds, Glos, and from Barrow Gurney, Blagdon and Chew Valley reservoirs, also from Durleigh, Somerset. Lapwing weather movements were recorded but Golden Plover and Snipe were much fewer than usual.

March was mild at first, with strong westerlies and heavy rain. Winds moved to the N.E. from the 13th; the rest of the month was cold and wet, with heavy snow in the north and some in the south-west. The miserable weather persisted in early April; a ridge of high pressure gave two warm days at Easter - in general the warmest Easter since 1949 - but the cold returned immediately. May was wet and cool too, except for a warm spell in mid-month.

A Spoonbill visited the New Grounds in March, and a number of Kittiwakes were recorded inland, including eight at Cheddar on the 16th, where an early Little Gull had been seen on the 4th. Relatively few summer migrants were to be seen until well into May. With the main rush, two Marsh Warblers came briefly to Avon. At

least 14 Hoopoes were reported in Cornwall, Devon and Dorset in April, and three more in Avon, with two others later in the summer. A White-winged Black Tern at the New Grounds, Glos on May 19 was that county's third record. On May 28 a Red-necked Phalarope at Bucklands Pool, Backwell formed a notable addition to the long list of waders and waterfowl to have been seen on this small water since its creation early in 1976. The Whimbrel passage was unusually small, and no reports were received of Little Stint or Curlew Sandpiper, two species whose numbers usually vary similarly.

The high water level at Chew Valley Lake led to a successful breeding season there, with many broods of Great Crested and Little Grebes, Mallard, Gadwall, Tufted Duck and Coot, but neither Garganey nor Ruddy Duck bred. At St George's Wharf, both Ringed and Little Ringed Plover bred, and Oystercatchers may have done so. Stonechat numbers appeared to be depressed following the cold winter. For the third year, no Whinchat was seen on Nailsea Moor, where the species used to breed, but the small Reed Warbler colony continued to thrive, as did the long-standing Sedge Warbler population.

The cool, unsettled westerly weather continued until mid-June, when an anticyclone to the S.W. gave a warm, sunny week before the cool, rainy westerly weather returned. July was generally dry, with several warm spells, but August was cool and unsettled, with severe gales and heavy rain at times in the first half. Considerable numbers of Manx Shearwaters and Gannets were seen on the coast between June and August. The autumn Whimbrel passage, like the spring one, was poor; few Knot were seen in either passage, compared with the large numbers of the 1960s. A flock of 22 Shag in August was far more than are usually seen, and there were several later records.

The first three weeks of September were warm and dry, with high pressure over all Western Europe, but the last week became cool, again. September rarities were a Richard's Pipit, a Melodious Warbler, a Pectoral Sandpiper, two White-winged Black Terns (as well as one in August) and three Wilson's Phalaropes. The flock of moulting Great Crested Grebes at CVL was smaller than is usual. Warm southerly winds in October's first week were followed by much rain. November started unsettled; there were strong winds and rain, then in the second week low temperatures and night frosts. From the 17th it became milder; an anticyclone brought a short dry and bright interlude, then in the last week a very mild S.W. air stream developed, and unseasonally mild weather continued into December.

During the autumn and winter - and indeed through the rest of the year - an interesting series of records of waterfowl, waders and gulls came from the cooling water lagoon at Oldbury Nuclear Power Station. Most of the records specified as from Oldbury-on-Severn in fact refer to this site. At CVL the high water level that had assisted breeding of waterfowl meant that autumn and winter wader numbers there were small, as no extensive mud was available. In contrast to the early months, Golden Plover flocks of some size were widely reported. Coot numbers at the reservoirs were only a few hundred in November and December, but there were well over 2,000 at Cheddar Reservoir, Som., in November and some 900 in December. For those whose main interest is in rarities the 'bird of the year' was a Greater Sand Plover, which stayed at CVL from Nov. 17th into 1980 - the second British record, the first having been in Sussex in December 1978 - and was seen by large numbers of visitors.

December's mild weather continued, giving probably the mildest start to the month in the south for 150 years. An unsettled period then began, with cold northerly air bringing rain and sleet in the north. In mid-month deep depressions gave gales and very heavy rain, with extensive flooding in parts of the south. As the wind moved to the N.E. it brought snow to the south and east, but fronts from the west gave renewed rain. There was a sunny Christmas Day, then more rain and colder weather to end the year.

GULLS

The Avon Gull Study Group's investigations into the interactions of gulls and man - roosting on reservoirs, feeding on refuse tips and breeding on rooftops - are summarised in the systematic list. Close study of flocks has revealed a few yellow-legged Herring Gulls, probably of the Mediterranean race Larus argentatus michahellis, which is spreading north along the French coast, and now breeds on the Ile d'Oleron together with the West European race L. a. argenteus and the Scandinavian L. a. argentatus. (Dr P. Devillers, personal communication). Some mixing and movement to Britain is therefore to be expected, and it should increase.

Dark-mantled Lesser Black-backed Gulls of one of the Scandinavian races have also been prominent lately (they have been known here for many years). The complicated matter of gull identification and taxonomy was discussed in detail in a valuable paper (British Birds 73:113-158, March 1980) by P. J. Grant. An interesting study of Herring Gull variation at a Midland roost is described by R. A. Hume in British Birds 71:338-345 (August 1978).

EXOTIC AND HYBRID WATERFOWL, AND ESCAPES FROM CAPTIVITY

A list follows in order of date of first report.

Wood Duck	Male, Eastville Park, Bristol from 1978 to end of March
Chiloe Wigeon	one, Royal Portbury Dock, Jan. 14
Pochard x Tufted Duck	one, CVL, April 28 - June 30
Wigeon x Gadwall(?)	one, CVL, May 12
Ferruginous x Pochard	one, Barrow Gurney Resrs., Aug. 25-Sep. 5
Ferruginous x Tufted	one, CVL, Sep. 1
Ferruginous x Pochard	one (another bird), CVL, Sep. 9.

Colour-ringed Scaup: male, Royal Portbury Dock, Jan. 14-Mar. 4
one, Bristol City Docks, Feb. 4-22
two, same place, October
three, same place, from Nov. into 1980

SYSTEMATIC LIST

SOURCES The following list is based on all records for the county of Avon sent to Bristol Naturalists' Society or Bristol Ornithological Club. (From the beginning of 1978 the Somerset Ornithological Society ceased to cover the area of South Avon in its annual reports on Somerset Birds.) Contributors' names are listed on page 40; we apologise for, and would like to hear of, any errors or omissions.

SEQUENCE The arrangement of species follows that of Prof. Dr K. H. Voous' recent revision, which is being used in the Handbook of the Birds of the Western Palaearctic, and which is recommended by the Report Editors' Standing Committee, British Birds and the British Trust for Ornithology.

ABBREVIATIONS NA denotes that part of Avon formerly included in Gloucestershire, and SA the remainder (which used to form District I of the Somerset Report). A few frequently mentioned place names are abbreviated:

ASW - Avonmouth Sewage Disposal Works and its surroundings, including Hoar Gout

CVL - Chew Valley Lake

SGW - the Royal Portbury Dock, the remainder of St George's Wharf, Portbury Wharf

/BBRC/ following a record indicates that it has been submitted to, and accepted by, the British Birds Rarities Committee

RED-THROATED DIVER

SA One at St George's Wharf, Feb. 2-5 (GP, GJU et al.).

GREAT NORTHERN DIVER

SA One, SGW, Feb. 4-5 (AH). An immature bird at Blagdon Res. from Dec. 2 stayed into 1980 (RJP, N&LT et al.); another was at Barrow Gurney Resrs. from Dec. 6-29 (CN, TBS et al.).

DIVER sp.

SA Single divers were noted flying up-river off Brean Down on April 1 (JP, JW) and on 29th (TAB).

LITTLE GREBE

NA One in Bristol City Docks, Jan. 5-29. The only other winter records were of up to six at Tortworth Park Lake early and late in year. Noted at latter also in summer; single broods, Littleton Pits and ASW. Single birds noted at latter, July, Aug., Oct. and Dec.

SA A few (seldom over five) noted early in year on various rivers, ponds and reservoirs; only one or two at Blagdon Res. and CVL, where breeding birds began to arrive at end March - 2 prs at former and c.18 prs at CVL, where c.21 broods (35+ young) seen later; one bird noted at Newton Park Lake in breeding season. Autumn: maximum of 66 at CVL (Sept. 30) falling to nine by Dec. 15 and one-two by 31st; up to seven at Barrow Gurney Resrs.; no counts at Blagdon; up to eight late in year at Bath - Newbridge, Keynsham and Saltford.

GREAT CRESTED GREBE

NA One, sometimes two, noted in Bristol City Docks, Jan. 29 - Feb. 13. One at Severn Beach, Oct. 20.

SA Rapid exodus from CVL in January due to severe freezing (only three left there on 29th); most moved to Barrow Gurney Resrs., where high count of 64 on 3rd; up to 60 remained by 13th and 31 on 27th. In same period, single birds were present at Bucklands Pool, Backwell (last seen, May 2) and Keynsham, and about six on coast (last seen, April 7). Single birds, SGW, May 1 and 29th.

At CVL, breeding birds returned from end March; 49 broods (100 young) were recorded later; the autumn moult flock was unusually small (peak below 60% of 1978 figure); monthly maxima follow:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
23	18	37	80	64	?	157	246	234	130+	241	39

Small numbers at other reservoirs: up to 33 at Barrow Gurney, up to ten at Blagdon (where one or two broods) and two (in March) at Litton. Single birds in Axe Estuary, Oct. 15 and Nov. 8.

RED-NECKED GREBE

SA One, CVL, Feb. 17 - March 4 (RSH, CN, GP et al.); one, Barrow Gurney Resrs., Feb. 21 - March 31 (GJU et al.); one, Blagdon Res., Feb. 23, joined by second, Feb. 25 - April 10, one staying to 26th (N&LT, KEV et al.). One, CVL, Oct. 6 (BLK) and one, Nov. 23 (RCP).

SLAVONIAN GREBE

NA/SA One in centre of Bristol (between Bristol Bridge and Redcliffe Bridge), Jan. 29 - Feb. 2 (KJH, HER, KEV et al.).

SA One at CVL, Feb. 4-25 (DB, JRG et al.); single birds at Blagdon Res. on March 18 (JA, WJS) and April 14 (JRB); one at SGW on April 8 (TBS). One autumn record: one at CVL, Oct. 27 - Nov. 19 (WGB, PJC et al.).

BLACK-NECKED GREBE

SA Typical spring record of one adult in summer plumage at CVL on April 13 (KEV). An adult at CVL from Aug. 15 was joined by another from Oct. 2-27, and one of them remained to Nov. 3 (PJC, AHD, KJH et al.). Two, Blagdon Res., Oct. 13 (AHD) and another, Nov. 11-17 (AHD, KJH). These autumn records involved at least four different individuals.

FULMAR

SA Noted off coast, Portishead to Brean Down, April 5 - Aug. 23 (most reports in April); single birds, except off Brean Down, where usually ones and twos, but four on April 18, at least six on 25th and 29th; two-three, June 15; and ten sightings of up to three on Aug. 23.

MANX SHEARWATER

NA One at Severn Beach and 20 at New Passage, July 7.

SA Early record of 25 at SGW, March 8 (MD). At Sand Point, 183 on June 13; 65 on 14th and 165 on July 21. Records of birds off Brean Down involve 396 on June 15; 90 on 30th; 500+ on July 7; 30 on 9th; four on Aug. 14 and eleven on 17th.

GANNET

NA An immature bird, Littleton Warth, Aug. 14.

SA Two, SGW, March 8 (MD); dead adult, Sand Bay, Aug. 25; off Brean Down, 21-33, July 7, some 90 on 9th, 33 on 19th and 20, Aug. 14th. A near-adult found inland on Sept. 20 (in a field at West Harptree) was later taken to the RSPCA (DW).

CORMORANT

Widespread reports of up to six on coast and at a few inland sites throughout year. Largest numbers were at CVL, where monthly maxima were as tabulated below; at least ten with white or whitish heads were noted on March 31 - probably older birds.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
35	55	46	32	17	12	15	34	30	44	41	46

In January severe freezing forced birds off CVL; many moved to Barrow Gurney Resrs., where a remarkable 55 on 6th, falling to 18 on 13th; also 15 at Litton Res. on 28th; small parties noted passing over Bristol in same period. Other records included up to 11, Blagdon Res., Feb. and Oct.; ten over Leigh Woods, April 15; 51 on Steep Holm, July 27; 11, Sand Point, Sept. 7; up to three on R. Avon, Keynsham-Saltford, Aug. - Dec.; up to five at ASW (max., Oct. 21).

SHAG

SA Unusually large flock of 22 immature birds, Brean Down, Aug. 17 (BR). Two, CVL, Oct. 31 (BLK) and two (immature), Dec. 2-3, then one until 15th, when found dead (AHD, N&LT, KEV et al.).

BITTERN

SA One, CVL, Jan. 7 - March 17; a second present, Feb. 25 - March 3

GREY HERON

Reported in small numbers throughout county.

NA One feeding at garden pond, Stoke Bishop, Bristol, Jan., Feb., and September. Ten, Severn Beach, Oct. 20. Four nests, Dodington.

SA At CVL, most recorded from July to December, with max. of 32 on July 28. At Keynsham, 21 noted on Dec. 8th. At least 70 occupied nests reported: 33 at Cleeve, nine at Newton Park, 17 at Portbury and at least 11 at Uphill.

MUTE SWAN

NA Winter herd in Bristol City Docks reached peaks of 43 on Jan. 6 and of 50 on Dec. 31st.

SA Largest herds reported: Bucklands Pool, Backwell, Jan. - May, with max. 38 in April (herd failed to develop in autumn through aggressive behaviour of resident pair); moulting herd, CVL, June to October, reaching 104 on Aug. 8; up to 26, Barrow Gurney Resrs., Sept. to mid-Dec.; and up to 31, R. Axe, Oct. - November. Broods reported from CVL (three, 15 young); Blagdon Res., Bucklands Pool, Backwell, Kenn Moor, Kennet and Avon Canal, Limpley Stoke Aqueduct and Portishead (all single broods).

BEWICK'S SWAN

Widespread influx in January's cold weather.

NA Two at Northwick and six at Aust, Jan. 1; one at Severn Beach on 6th, and unusual record of three, Eastville Park Lake, Bristol on 11th. In October, ten in flight at New Passage on 27th and seven on 28th, also three at Littleton Warth on latter date.

SA Recorded regularly at Blagdon Res. and CVL until March 26, with max. of 20 on March 4; three yellow-dyed Slimbridge birds were at CVL on Feb. 6. Elsewhere, 11 over Sand Bay on Jan. 1; two, Barrow Gurney Resrs., Jan. 1-2; two, Bucklands Pool, Backwell, Jan. 1 and one irregularly until Feb. 22; 12, Axe Estuary, Jan. 4; 18, SGW, Jan. 5 and one on Feb. 22.

Present again at Blagdon and CVL from Oct. 25, when 21 at Blagdon; up to eight at each lake until Dec. 13; herd of 26 (three immatures) seen briefly at CVL on Dec. 15 - last report for year. Eight, Barrow Gurney Resrs., Oct. 28; ten over Bishop Sutton, same

PINK-FOOTED GOOSE

SA One arrived at CVL, Nov. 22 (JBOR, KEV), remaining into 1980 and later joining flock of Canada Geese. Fourth record for CVL.

WHITE-FRONTED GOOSE

Large numbers reported in January's cold, mostly in flight presumably en route to or from New Grounds, Glos.; monthly totals (including some possible duplication) were: January 1,173; February 274; March one. The larger flocks were, in NA: 107 at Northwick Warth on Jan. 1, also 57 (8 imms.) grazing on 27th, and 150+ in flight on Feb. 13; over Bristol, 48 on Jan. 2, 40 on 15th and 41 on 26th; 50 at Yate and 50 at Avonmouth, Jan. 15; and 56, Littleton Warth on Jan. 28; and in SA, 76 at SGW, 50 on Nailsea Moor and 82 at Sand Bay, all on Jan. 1; 130, Weston-s-Mare, Jan. 5; up to 100, Axe Estuary, Jan. 6 - Feb. 20; at CVL, Jan. 9 - Feb. 20 (max. of 89 on latter date); 60, Abbots Leigh, Jan. 23 and 40 at Clevedon on 30th.

Few noted late in year: in NA, two at Northwick Warth/Aust on Dec. 20 and six on 22nd; and in SA, 17 in flight, Redcliffe Bay, Oct. 21 and four at CVL on Dec. 20.

GREYLAG GOOSE

SA Feral birds continue to increase in numbers at CVL; four from 1978 until March 22; three, June 27; seven present by July 7 and eight, July 10 - Sept. 30; two, Dec. 30.

CANADA GOOSE

NA One, Littleton Warth, May 2.

SA Two, Barrow Gurney Resrs., Feb. 25; single birds, Blagdon Res., April 29 and May 30; one, Bucklands Pool, Backwell, May 2. At CVL, increase continues; six broods (27 young) were recorded; monthly max.:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
60	61	60	22+	42	71	71	82	78	69	74	82

BRENT GOOSE

All records refer to the Dark-bellied race, Branta b. bernicla.

NA Unusually large flock of 39 flew past Severn Beach and landed on water at Northwick Warth, Jan. 21 (BL, NTL, RGT). Four in same area, Feb. 3; one, Aust Warth, March 3; and one, Northwick Warth, April 28-29 (BL, RGT); one Littleton Warth, April 16 (GT).

SA Four, SGW, Feb. 3, and one, March 4 (GP, TBS, GJU); six, Axe Estuary, March 3-4 (RA, RP). Two, CVL, Dec. 8 (N&LT, KEV) - third record for lake.

SHELDUCK

Much movement early in year, but county total some 550 in mid January (perhaps inflated by weather movements) and 380 - 420 from early February until early April, but only some 170 in early May. Eleven, Steep Holm, May 19 (BES). Pairs prospecting for nest sites noted at Shiplate Slait (6 pr - PJC, GS), West End, Nailsea and Nailsea Moor, April 18 - 28. First brood seen, Kingston Seymour, May 20; last small young arrived, Sand Bay, late July. Estimate of young produced: none in NA, 110-120 on SA coast (no broods reported in NA; adults with parties of juveniles noted in July had probably moved up- or down-river). Flock of 67 noted on moult migration, Sand Bay, July 7 (TBS). Some 40 in county, late October, rising to c.95 on Nov. 25 and c.165 by Christmas. At reservoirs, one or two at Blagdon and at CVL, Jan. - Feb., up to three at Blagdon and five at CVL in March, ten at latter in April and 13 in May and June, but only one pair remained after June 10; this pair bred, five young appearing on June 13 and being last noted on July 29, after the adults had left. One or two, CVL, September to end-year.

WIGEON

Unprecedented numbers along NA coast from Littleton to Avonmouth early in year - total rose from 70 on Jan. 1 to 1,300 on 28th and 1,500 on Feb. 3 and on 17th, but only 140 by 24th. Sheperdine - Oldbury stretch held 177 on Jan. 14 and 35 on Feb. 11.

Avon total was approximately 2,550 in mid-January, falling to c.2,000 on Feb. 18 and 1,300 on 24th/25th; some 265 present, middle of March. Late males at Bucklands Pool, Backwell from April 24 to May 24 and at CVL throughout June (nine birds there on July 14). Autumn arrivals first at CVL, Aug. 26; four on R. Severn at Northwick on Sept. 7 and one off Clevedon on 16th, but total rose only very slowly to 275 in mid-November and c.535 on Dec. 15.

AMERICAN WIGEON

SA The male bird reported at CVL in 1978 remained until January 20.

GADWALL

The hard weather caused some dispersal in January and more coastal records than usual.

NA Pair, Severn Beach, Jan. 1; one, ASW, Jan. 17-18, and nine on R. Severn at Aust, Feb. 28. At Tortworth Lake, reports of one, Jan. 21, eight on 28th, six on Feb. 11 and a pair on March 4; then three on Sept. 16 and a pair on Nov. 4 and Dec. 16. A male, Littleton Pits, April 1 and a pair on the 8th.

SA Coastal records from Axe Estuary: three, Jan. 3 and seven on 31st; a pair on Feb. 1 and 4th, and four on Oct. 17th. Numbers at reservoirs very low from January to March (total of less than 45); increase in April to 115-135, mostly at CVL, where 29 broods seen later.Total up to 300 in August, but only 75-80 in mid-September, 60 in October, some 25 in November and only 16 in mid-December, though 40 noted at CVL on 13th and 25 at end of year. A female at Bucklands Pool, Backwell, Oct. 2 and 3.

TEAL

Approximately 1,025 in county in mid-January and some 1,750 in mid-February (Blagdon and CVL counted on different days); c.850 in mid-March, only 110 in early April and c.10 at end of month. On May 12 and 13 a female was seen at CVL, but there was no evidence of breeding. June total 27 (25 at CVL, pair Blagdon) but fewer in July. Autumn onwards: c.400 in mid-August, 675 in mid-Sept., only 415 in October, 660 in mid-November and 1,050 in December.

MALLARD

Breeding records (from only 20 localities) involved 93 nests or broods (56 at CVL) and included a late brood of 14 at Eastville Park Lake, Bristol on Oct. 25.

Some 1,550 - 1,650 reported in January and February, but under 600 in mid-March; approximately 1,900 by mid-September and 2,100 in October, falling to 1,700 in mid-November and 1,500 in mid-December.

PINTAIL

NA A pair, Tortworth Lake, Jan. 21; a male off Aust, Feb. 3 and a pair on April 1. Three off New Passage on Dec. 22.

SA Maximum of 16 in first winter period, a few staying to April 8. Flock of 15 flew to SW over CVL on Aug. 17, but under ten present until Sept. 24, when 19 counted. Reservoir totals 35-40 from end of October (up to 13 at Blagdon, remainder at CVL). Coastal records: one, Clevedon, Jan. 7; three, Sand Bay, Sept. 29 and seven on Oct. 5; one, Axe Estuary, Oct. 17 and five in Yeo Estuary on December 28.

GARGANEY

SA Chew Valley Lake: one. March 11, then a pair from April 6 to June 17, and three birds on June 30; no reports in July; noted in August (max. 12 on 12th) with five on 29th, but only one on Sept. 8 and two on 9th. Two in Yeo Estuary on latter date.

SHOVELER

NA Regular at ASW, January to March, with max. of 19 in late Feb.; single birds up to April 21; noted there on five dates in November (max. of seven on 26th and 27th) and three dates in December (max. 12 on 28th). Pair, Tortworth Lake, Jan. 21, 25th and Feb. 11. Coast: a male, Littleton,April 8 and a pair, 12th-15th; a pair, Aust - Northwick Warth, April 1, a male on 8th and a pair, Oct. 28.

SA At the reservoirs, over 180 on Jan. 6 but only 44 counted on 13th-14th; 115 in late February, down to c.50 in mid-March and under 25 by late April. At CVL a pair hatched eight ducklings, but seen on only one day (DW). Big influx in late July, when 70 at CVL, then up to 115 to Aug. 18 and 260 on 19th; many moved to Barrow Gurney Resrs., where up to 104 on Sept. 20; reservoir total 315 on Nov. 11 and up to 500 in December. Coastal records: at SGW, seven on Jan. 21,four on Feb. 18 and seven on 25th, and five, March 18; at Axe Estuary, six on Jan. 22 and one, Oct. 3; at Sand Bay, a pair on April 15 and four on Sept. 8.

RED-CRESTED POCHARD

SA A female was present at Blagdon Res. on March 11 and 30, and this or another at CVL from April 21 to 29th; a male was also seen there on May 20-21. A male at Victoria Park, Bath on Oct. 14 was presumably not a wild bird.

POCHARD

The cold caused a wide dispersal from CVL early in year, with birds reported on R. Severn off Severn Beach, at ASW, in mouth of R. Avon and at SGW (up to 125), on R. Avon at Sea Mills and inland as far as Saltford (up to 43), in Bristol City Docks (six on Feb. 11), on the small lake at Wills' Factory, Hartcliffe, Bristol (up to nine) and in the R. Axe estuary.

NA At ASW, up to 16 in January, 33 in early February but 18 for rest of month, 12 on March 1 and 2nd, then usually one or two up to April 22; up to six from mid-November to end of year. Four off Severn Beach on Jan. 28 and Feb. 26. At Tortworth Lake, five were noted on Feb. 11, eight on March 4, single birds on April 29 and June 3; two, Nov. 4 and two, Dec. 16. Six, Littleton, March 4 and five there, Aug. 26.

SA Count of 200 at Barrow Gurney Resrs. on Jan. 3, but SA total probably below 350 throughout Jan. and Feb., with over a third of these in SGW area in mid-February. Up to 165 (mainly moulting males) at CVL in late June; at least four pairs bred there. From autumn onwards the SA total was c.250-275.

TUFTED DUCK

As with Pochard, cold caused dispersal to coast, rivers and minor waters in January and February. On R, Avon at Saltford, 95 in late Jan., cf. nil to 35 earlier; up to 67 in Feb., with another peak of 90 on 18th. On Wills' lake, Hartcliffe, Bristol, number more than doubled to 25 in late January. On Bucklands Pool, Backwell, up to 21 in January with 33 on 18th, up to 30 in February and 18 in March. At SGW, up to nine in Jan., seven (on 17th) in Feb., and one on March 18. On coast; at Axe Estuary, eight, Jan. 3, eleven on 12th, 23 on 22nd and one on 31st; off Clevedon, one, Jan. 7; seven in Sand Bay, Jan. 27 and one off Aust, Feb. 3.

County total about 550 from January to April; maximum in September (about 765), then decline to c. 500 in December. Breeding reported from Tortworth Lake, Wills' lake at Hartcliffe, Bristol and CVL (3, 2 and 24 broods). Two birds, Oldbury on Severn, Dec. 22.

SCAUP

SA Records refer to single birds unless otherwise stated. Immature males at Barrow Gurney Resrs. on Jan. 2 and 13th, and in Axe Estuary on 3rd. Female, Bucklands Pool, Backwell, Jan. 14 to April 27. At CVL, females or immature birds, July 15, Oct. 27 and Dec. 16, and a flightless male on Sept. 1; a female at Blagdon res.

on Oct. 28 was perhaps the CVL bird. Three (2 males) in Axe Estuary, Oct. 17 and one on 30th. Four, Barrow Gurney Resrs., Dec. 17, and two on 24th.

Considerable doubt must be attached to the genuine wildness of Scaup seen inland in Avon, in view of the presence of colour-ringed birds at Portishead - Sea Mills, two in Bristol City Docks in January and up to three from October into 1980.

EIDER

SA Only three reports - a female with an immature male off Clevedon on Jan. 7 (NAL), a female on Barrow Gurney Resrs. on Feb. 16 (MD) and one seen flying into Weston Bay on April 25 (BR).

LONG-TAILED DUCK

SA Single birds present at CVL on Oct. 27, Nov. 24 and 25th, but three on Nov. 11-18 and two, Dec. 16 (RMC, SBE, N&LT *et al.*). One, female or immature, at Barrow Gurney Resrs., Nov. 4-8 and again from Dec. 16-24 (KJH,CN,TBS *et al.*)

COMMON SCOTER

NA One in pools at ASW on Feb. 20. Three (2 males) off Chittening on July 21 and two males on 28th.

SA Noted off Brean Down chiefly in April: seven females, Jan. 6; party of 16, April 1, seven on 6th, a male on 15th and 22nd, and three on 21st; and a pair on July 9. Party of 17 to S off Middle Hope on June 18. A female or immature off Clevedon, Nov. 10. At CVL, one on Feb. 17, one on April 2, seven (3 males) on July 3, a male on 22nd and a pair on 28th.

GOLDENEYE

NA A pair. Monkswood Reservoir, Bath, Jan. 6-9; a female, Tortworth Lake and a male off Severn Beach, both Jan. 28.

SA Coastal records: one off Clevedon, Jan. 7 and (a male) 14th; a female, Royal Portbury Dock, Feb. 1 - March 18; two off Clevedon, Sept. 16 and one, Axe Estuary, Oct. 30. One, Bucklands Pool, Backwell, Oct. 28. The reservoir totals were 39, Jan. 13, c.35 from Feb. 18 to March 11 (but 67 at CVL, Feb. 24), 55-60 from March 17-31 falling to 24 by April 22; up to five, early May and one as late as 20th. One at CVL, Aug. 26 - Oct. 7, with increase to 15 by end of month, 18 in mid-November and 20 on Dec. 9th. Reservoir totals were c.30 in mid-November and c.25 from Dec. 15 to end of year.

SMEW

SA A pair, Axe Estuary, Jan. 3 (RA) was an unusual record, as most Avon sightings are at reservoirs. Reservoirs: one, Barrow Gurney, Jan. 6-7; male, Blagdon, Jan. 27 then up to four in February, a male on March 3-4 and a pair from the 17th-31st; at CVL, a female, Jan. 8 and two on 13th; four (1 male) on 27th and up to four (1 male) to Feb. 2 , only one from 26th - March 3, two females from March 11-16 then one to April 27, with a male also there, Apr. 1st. A male in eclipse plumage visited CVL from Oct. 25, moving to Blagdon on Dec. 25; a female was at CVL from Nov. 10 to year-end.

RED-BREASTED MERGANSER

More records than usual, but all from SA.

SA A 'brownhead', Axe Estuary, Jan. 20 (RA). A male, R. Avon (Sea Mills), Feb. 5 (HER). A 'brownhead' in Sand Bay, Dec. 21 (RA) and a male off Clevedon, 28th-30th (ILC, INW). All other records from Blagdon Res.: a male, Feb. 11 (with possibly three females, though description not conclusive)(RP) and 23rd-25th (PAG, LT et al.) and a 'brownhead' on Nov. 11 (PJC).

GOOSANDER

Record numbers in county but none reported from NA.

SA The 'brownhead' off Clevedon, first seen in 1978, stayed until March 4. Five to NW over Leigh Woods, Jan. 5; one in Royal Portbury Dock on 11th; a male, R. Avon, Saltford, 14th - 28th and four birds at Chewton Keynsham, April 1; a pair off Clevedon, Dec. 30.

Reservoirs: total of c.120 (up to 20 males) in early January and c.80 on 21st; steady fall in February (65 on 4th to 36 on 20th) then a sharp rise to at least 85, possibly over 100, on 24th and 25th; 14, March 3, but 39 on 11th and 30 on 31st; six, April 2 and a pair on 9th. Single females at CVL and Blagdon on Oct. 28; up to 18 at CVL by Nov. 25, and reservoir total at least 42 on Dec. 15.

RUDDY DUCK

In January's freezing conditions the CVL flock dispersed widely both within and outside the county, but the birds returned in March. In this period counts at the reservoirs varied widely: at Barrow Gurney, one on Jan. 3rd, 160 on 27th and 60 on 28th, 53 on Feb. 24 and eight next day; at Blagdon, up to 110 in January (on 13th) and in February (on 25th) but only seven on Feb. 10; at CVL, totals ranged from seven to 51 in January, 32 to 186 in February and 80 to a record 317 in March (on 11th). Other reports: two at Aust on

Jan. 6; two at Clevedon on 21st; one in Royal Portbury Dock on 28th; a female on R. Avon at Salfford, Feb. 27. Monthly peak totals:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
205	195	325	65	8	3	10	10	30	169*	237	263**

* 149 at CVL **163 at CVL

There was no evidence of breeding within the county.

RED KITE

SA One over Brean Down, Som. on March 18 flew in direction of Uphill and so presumably entered Avon. (JP).

MARSH HARRIER

SA A female or immature bird visited CVL on May 19 (AHD, RM).

HEN HARRIER

SA A 'ringtail' was noted at CVL throughout January (WE, SK et al.) and another at Blagdon Res. on Jan. 7 (N&LT). Single males were reported from the Axe Estuary several times in January (RA, TAB, BR) and in the Sand Bay area on 7th (JW), and at SGW from Feb. 10-15 (AB, JAH, JRB, TBS). A male was noted at Sand Bay on Nov. 3 (RA, TBS) and later the same day in the R. Banwell (MAS).

SPARROWHAWK

Reported in breeding season from 43 localities (13 in NA) with evidence of breeding at seven - four in ST57 Iincluding three within the Bristol City Boundary) and one each in ST46, 77 and 78. Many reports in remainder of year.

BUZZARD

NA As in 1978, evidence of three pairs along the Avon/Glos border (in ST69 and ST78); a June sighting also from ST58, but no evidence of breeding.

SA Breeding-season reports from some 20 localities. Many reports outside the breeding season.

OSPREY

NA One at New Passage, Oct. 27 (NTL).

SA One at Flax Bourton, May 17 (DAJ, MJ).

KESTREL

Breeding-season records from some 96 1-km squares (40 in NA). Records within Bristol City boundary indicated 18 pairs; 14 nest sites were located and three other pairs probably bred.

Elsewhere the only nests reported were at Queen Charlton (ST56), Portbury (ST47) and Frenchay (ST67). A search of several traditional sites proved negative, and the season seems to have been a poor one for breeding outside the urban environment. Large numbers of reports outside breeding season.

MERLIN

NA Five reports of a female between Severn Beach and Aust Cliff, Jan. 27 - Feb. 10 and again on March 8 and 30. A female, Filton, Feb. 11 (N&LT). A male, Stoke Gifford, Oct. 13 (PJC). A female, between Chittening and Aust Warth, many dates in October - December (BL, NTL, RGT).

SA A female at SGW on several dates, Jan. 6-28 and on Feb. 22 (AH, GP et al.) - possibly the NA bird. One, Axe Estuary, Jan. 22 (BR) and one, Clevedon, Feb. 11 (RS). One, Axe Estuary, Oct. 8-12 and on Nov. 7 (RA, BR). Inland, noted at CVL on Jan. 13 (RMC), March 3 (DB), Oct. 13 (RMC) and Nov. 17 (LJW) - all single birds.

HOBBY

NA One pair bred; first seen in locality on May 14; three young reared; all ringed July 21 and fledged Aug. 21. Three records from other localities of single birds in the breeding season.

SA Breeding-season reports from only two main areas. Other records; two migrants flying N, Sand Point, May 6 (TBS); single birds at three other localities, late August-September; one flying S, Keynsham, Sept. 23 (AHD). Latest record: one, Nailsea area, Oct. 14.

PEREGRINE

NA In Chittening-Aust area, single birds seen on Jan. 6 (taking a Redshank) and 24th, Feb. 25 (an immature bird) and March 2; an adult in same area, Aug. 4 and an immature bird from Nov. 3 - 28th.

SA One, Axe Estuary in January and two, Feb. 9 (BR); an immature male at SGW on Feb. 8 (GJU); a male and female there, April 19 (MTD); a male, Blagdon Res., Jan. 13 (AHD); at CVL, an adult female noted throughout Jan., also an immature male on two dates; one throughout February and March (immature female, March 6 - N&LT) and April 15 (AWH). An immature bird, SGW, Aug. 19 (TBS); single birds, Axe Estuary, Sept. 5 and 24, several times in October and Dec. 31 (RA, BR); also at Weston Woods, Oct. 7 (RA), Sand Point, Nov. 3(KJH et al.) and Sand Bay, Dec. 23 (RA). At CVL, an immature bird, Oct. 6, an adult, Nov. 18 and one, Dec. 16; at Blagdon Res., one on Dec. 21 (JW).

RED-LEGGED PARTRIDGE

Both this species and Grey Partridge were reported from more localities than in recent years.

NA Breeding-season reports of a pair at Marshfield and single birds at Latteridge, Frampton Cotterell, Wapley and Hinton. A covey of five was noted at Wapley on Dec. 2.

SA Pairs were reported in the breeding season from Chewton Keynsham, Compton Dando and Priston; and single birds from Stanton Prior. A covey of 13 was noted near Burnett on Oct. 28.

GREY PARTRIDGE

NA Breeding-season records came from Aust, Tockington (nest with 13 eggs, April - AEB), Alveston, Marshfield and Oakford. Coveys were reported in winter from Littleton Warth (seven birds, in October) and Alveston (six, in December).

SA Reports during the breeding season from nine areas; young birds were seen at Chew Magna (two), CVL (six, July) and Brinsea Moor (a covey with young during summer). Winter reports from eleven places ranged from one to a covey of eleven.

QUAIL

An estimated eleven birds were heard (and one was seen) during July at Marshfield (NA), and single birds were heard in SA near Winford in May and at Stanton Prior in July.

WATER RAIL

Records in winter only, two referring to corpses.

NA Single birds at Chittening (remains of kill) and at Hoar Gout.

SA One at SGW in February and three records from Chew Magna in March. One killed by cat at West Harptree.

MOORHEN

Widely distributed; several observers expressed the opinion that numbers were reduced after the 1978-9 winter, especially in SA. Within the City of Bristol, three pairs bred at Hartcliffe and one pair at Eastville, but predators (including man) killed all the young; at St George Park, breeding was probably successful. A mainly albino bird was noted on the Avon at Keynsham in September.

COOT

During the cold weather in January, birds were reported from the R. Severn at Aust and Severn Beach; and in Bristol from the R. Avon and the City Docks.

NA Bred at Tortworth Lake, Littleton Pits and ASW.

SA Breeding reports received from Hunstrete and Newton Park Lakes, and from the reservoirs. At CVL, KEV counted 68 broods with 174 young. The monthly peak counts at Barrow Gurney Resrs. and CVL:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BG	40							105	225	409	426	277
CVL	225	585	520	500	610		1085	1460	841	536	328	264

Of the relatively few Blagdon counts received, the max. was 335 (Feb.)

OYSTERCATCHER

NA Up to four, Aust to Chittening, and one or two elsewhere on coast, January and February, and mid-June to year-end; small passage in April indicated by four at Sheperdine on 14th, 17 at Severn Beach on 15th and two at Littleton Warth on 27th.

SA At SGW, up to five from February to August, but 16 on April 16. From Clevedon to R. Yeo, present all year, generally up to 11 but 17 on March 4; one pair probably bred. In Sand Bay, present all year, with counts between 30 and 50 up to April 10 (but 72, Feb. 24), then 20 or fewer up to mid-October and up to 41 from then to year-end. In the Axe Estuary, up to 61 from January to June 1, and up to 50 from Aug. 18 to year-end (but 110 on Aug. 26).

Inland, only at CVL: occasional single birds up to June 30, up to nine from July 30 to Oct. 24 (but 15 on Aug. 19).

AVOCET

SA One record - one at Axe Estuary on Jan. 1 (BR) - seen also on Dec. 30, 1978 (TRJW).

LITTLE RINGED PLOVER

NA One at Severn Beach on April 3 and one at Littleton Warth on April 8 (GT).

SA At SGW, single birds were noted on April 16 and May 7 (WGB) and a pair present through June and July raised four young (MTD, GY). One present at Uphill, Aug. 30 (A J O'N). At Chew Valley Lake, two on April 9 (DAA,PMG) and one, May 12 (RP); an adult, July 22 and a juvenile on 28th (8 observers); main passage from Aug. 4 to Sept. 21 with up to three present (four on Sept. 1) - all juveniles except for single adults on two dates (many observers). At Barrow Gurney Resrs. a single juvenile bird was present from Aug. 19-26 (KJH,KEV).

RINGED PLOVER

As in 1978, a pair bred at SGW; four young were reared. At Barrow Gurney Resrs. a few were present during the autumn passage, 16 being noted on Aug. 25 and up to six between Sept. 1 and 19.

The table gives the monthly maxima in the main areas: in NA, Oldbury Power Station, Severn Beach to Chittening; and in SA, SGW, Sand Bay, Axe Estuary and CVL.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
OPS	70	30	8		12	2	28	200	270	50	33	3
SB/C	24	25	25	51	131	37	30	750	330	80	37	31
SGW	10	25					10					
SBay	25	37			32	3		210	207	20	36	18
Axe	55	80						62	65	62	47	5
CVL			1					6	22	3	1	

GREATER SAND PLOVER *Charadrius leschenaultii*

SA A single bird was present at CVL from November 17 to the end of the year (CN, KEV *et al.*). The first record for Avon and the third for Great Britain (all three within twelve months). /BBRC/

DOTTEREL

SA One near Woodspring Priory, Aug. 24 (JW); one at Middle Hope on 26th was almost certainly the same bird (PBK, MAS).

GOLDEN PLOVER

NA At Littleton Warth, c.30 on Jan. 24 and one on Oct. 24. At Chittening, one on Sept. 28. At Tormarton, two on Sept. 22 and some 200 on Oct. 21.

SA Recorded from Jan. 1 to March 18, on May 2 and from Aug. 4 to year-end. Counts of 100 or more:

	Jan	Feb	April	Sep	Oct	Nov	Dec
Chewton Plain		110			233		
Marksbury Plain			113				132
Kenn Moor		150					
Nailsea Moor					200		
Clevedon-R. Yeo	140	100			233	200	203
Axe Estuary				200	320	173	350

Five at CVL, Jan. 21; from Sept. 9 onwards the monthly maxima there were one, 19, 18 and 95.

GREY PLOVER

NA Noted on coast, January, February and Aug. 27 onwards, with up to six at Sheperdine, two at Oldbury and seven at Severn Beach (but ten, Oct. 6 and 38 on 14th at latter place). One or two, Oldbury Power station, in May.

SA Noted on coast in winter months and April 15 - June 10, with up to two at SGW, six from Clevedon to R. Yeo, one in Sand Bay and two in Axe Estuary. At CVL, one, Aug. 19 and one, Dec. 13.

LAPWING

NA Breeding proved at Wickwar (2 yng), Westerleigh (3 yng), Aust (4 eggs); breeding probable at Falfield, Wapley and Littleton on Severn. At Northwick, 1,000 on Jan. 1, falling to 300 on 27th and 60 on March 3; autumn flocks of 300, June 25, reaching 1,000 on July 13 and 1,700 on Aug. 29, then decreasing to 500 or less to year-end. Some 1,500 in Tormarton area, Sept. 15. Counts on R. Avon at Sea Mills fell from 120 on Jan. 22 to two by March 5: pre-

SA Breeding proved at Ashton Marsh (2 pairs), Portbury (6 pairs), Nailsea Moor (2 pairs) and Congresbury (a pair); and probable at Failand, Norton Hawkfield, Sutton Hill, Marksbury Plain and Walton Moor. Numerous flocks noted moving W or SW during the cold weather in early January. Winter flocks of 500 or more were noted in January at SGW (600), Clevedon - R. Yeo (600) and Axe Estuary (3,000); and in February from Clevedon - R. Yeo (1,000).

Autumn flocks of 500 or more were recorded from July 1; peak monthly counts from then to the end of the year in the main areas:

	July	Aug.	Sept.	Oct.	Nov.	Dec.
Clevedon - R. Banwell	700	3,000	1,100	400	250	900
R. Axe Estuary			800		1,500	1,000
Chew Valley Lake	150	730	800	650	350	2,000

KNOT

The gradual decline of this species in Avon continues; for the first time in 25 years no count reached 50.

NA Oldbury-on-Severn: three, March 18; one, May 9, 16 from Sept. 9-13 and 20 on the 23rd. Aust to Chittening: up to six in January, five on Feb. 18, 18 on May 13, ten or fewer on six dates from July 28 to Nov. 10 (but 12 on Sept. 15, 48 on Oct. 14 and 30 on Oct. 7.

SA Three at Sand Bay, Jan. 1-3, and at Axe Estuary, Feb. 20. Present again from Aug. 8 to year-end, counts exceeding three only in September, when maxima of eight at Clevedon and 44 at Sand Bay. Inland records only from CVL - one on Feb. 24 and one, Sept. 21-23.

SANDERLING

NA Severn Beach: spring passage from April 18 to June 3; generally up to three birds, but six on May 9 and 18th, twelve (nine in summer plumage) on May 22 and ten on June 3; autumn passage from July 23 to Sept. 7, with up to three birds on six dates. The only other reports were of one at Oldbury-on-Severn on Sept. 9 and one at Northwick next day.

SA No spring records from the coast; single birds noted at CVL on May 5 and 14, and at Blagdon on 9th. Autumn passage from July 22 to Sept. 20; at Sand Bay, six on July 27, up to seven on five August dates, and from six to 20 birds on eight dates between Sept. 1 and 20th; eight at Axe Estuary, Aug. 25; inland, one at CVL on July 22 and three on Sept. 9.

LITTLE STINT

No records received of spring passage.

NA One at Oldbury-on-Severn, Sept. 3 and three, Oct. 7 (TGE, JDRV). Four, Severn Beach - Aust, Sept. 30 and one, Oct. 6 (BL, NTL, RGT).

SA Two, Clevedon - R. Yeo, Oct. 7 (MSK, HER). At Axe Estuary, one on Aug. 30 and one, Oct. 6 and 7th (RA, AJO'N, BR). At CVL, present from Aug. 9; single birds noted in August, up to four in September, up to 13 in October and up to four in December (many observers). One at Blagdon Reservoir on Nov. 17 (AHD).

PECTORAL SANDPIPER

SA One at Axe Estuary, Sept. 24-25 (BR).

CURLEW SANDPIPER

No records received of spring passage.

NA Ten at Oldbury-on-Severn, Sept. 9 and one, Oct. 7 (TGE, JDRV). Six at Northwick Warth, Aug. 27 (RGT). One at Severn Beach, Sept. 22 and one, Oct. 13 (BL, NTL, RGT).

SA Small numbers on coast, Aug. 26 to Oct. 28. At Clevedon, single birds on Sept. 1 and 16th, Oct. 7 and 28th, and two on 10th (MSK, HER). At Sand Bay, one on Aug. 26, two on 27th (RA, PBK, TBS), one on Sept. 6-7 and 15th, two on 8th and three on 9th (RA, GWR, JW). One at Uphill, Sept. 8 (AJO'N). Recorded at CVL from Aug. 21 to Nov. 21; single birds present on eight dates, three on Sept. 7 and 8th, and four on Sept. 21 and 22nd (many observers). One at Blagdon Reservoir on Oct. 28 (SBE).

PURPLE SANDPIPER

NA Reported only from Severn Beach, where present from January to May 11 and again from Oct. 27 to year-end; maxima of 4-6 to end of April, and three in other months.

SA Two at SGW, April 9 (MTD). One at C VL on Dec. 11 (AM) was the second record for the Lake, the first being in November 1969.

DUNLIN

The table shows the monthly maxima of this, our most numerous wader, in the main areas: Sheperdine, Oldbury-on-Severn, Severn Beach to Chittening, SGW, Clevedon to R. Yeo, Sand Bay, Axe Estuary and Chew Valley Lake. Two large flocks were also reported from Littleton-on-Severn: 950 in January and 300 in February.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Shep.	880	620								155	150	102
OPS	600	650	250	nil	230		550	550	300	470	800	500
SB/C	5000	7000	2500	575	1000	40	150	300	150	500	1000	800
SGW	300	500	200	20	4		250					200
C/RY	2200	2000	1200	160	120	15	35	150	73	1200	2500	2000
SBay	1500	5000	600		200	1	570	500	500	1100	2000	2500
Axe	1000	3000	300								600	2000
CVL	330	100	20	21	9		8	21	22	15	116	200

RUFF

NA One, Oldbury-on-Severn, Sept. 9 (TGE, JDRV). Present at Northwick Warth from Aug. 22 to Sept. 9 and on Oct. 7; generally up to five birds but 12 on Aug. 26 (BL, RGT).

SA Recorded on the coast only at Axe Estuary - one, Jan. 3 and one or two, Oct. 6-9 (BR). Reservoirs: at CVL, up to six in January, two on Feb. 20, three on March 3 and one on 6th. Present again from Aug. 10 to Nov. 3, with monthly maxima of nine on Aug. 30th, 16 on Sept. 9 and three thereafter. At Barrow Gurney Resrs. up to four on Feb. 24-26 and two on Sept. 3-5 (many observers).

JACK SNIPE

NA Single birds at Littleton Warth on March 30; from Aust to Chittening occasionally up to March 4 and from Oct. 8 onwards; and at Sea Mills on Jan. 26.

SA Coastal records up to March 19 and from Nov. 19 onwards: up to three at SGW, two near Clevedon and two, Sand Bay. One at Kenn Moor, Jan. 28. At CVL, one on Oct. 5 and two on 17th.

SNIPE

NA Recorded from January to April and July 27 to December; usually up to three birds on coast, but 11 on Aug. 27 and six on Sept. 8, between Aust and Chittening. At ASW, max. of 16 (on Jan. 11) until April, and max. of six (on Dec. 9) from July 27oonwards.

SA Coastal records up to April 1 and from July 1 onwards; largest counts from Clevedon to R. Yeo, where 35 present on Jan. 21 and 65 in December. At Ashton Marsh, Bristol, 61 present on April 25 and males drumming in April and May; pair displaying, SGW, May 29; no proof of breeding at either place.

At the reservoirs, noted up to May 19 and from Aug. 2, with monthly peak counts as follows:

	Jan	Feb	Mar	Apr	May	Aug	Sep	Oct	Nov	Dec
Blagdon	5	5					5	150		2
CVL	6	6	20	6	6	20	35	150	40	10

WOODCOCK

NA Two at Tortworth Lake, Jan. 28 (JH). One at Moorgrove Wood, Henbury, Bristol, Oct. 24 (SC).

SA Single birds reported from Blagdon Res., Jan. 1; Abbots Leigh on 20th and 23rd; Windmill Hill, Portbury, Jan. 21; CVL, Jan. 10 and 28th; Leigh Woods, March 21; Hutton, March 24; Canada Combe, April 5; West End, Nailsea, Oct. 24; Banwell, Nov. 2; Weston Moor on 5th and Upper Langford on 17th. One found dead on M5 near Clevedon interchange, Dec. 24 (BR).

BLACK-TAILED GODWIT

NA Eight, Oldbury-on-Severn, May 9 - the only spring record; up to five there and Aust to Chittening, July 10 - Oct. 14, but in latter area 15 on Sept. 7 and ten on 9th.

SA One, Axe Estuary, Jan. 1-2. Spring records from Clevedon to R. Yeo (one, April 15 and two, May 6) and CVL (one, May 25 and six on June 27). Noted in autumn, coast and CVL, from July 16 to Nov. 10, with a maximum of four.

BAR-TAILED GODWIT

NA Spring passage April 10 - May 13: up to five on six dates, mostly from Severn Beach - Chittening (where also six on Jan. 1). Autumn passage July 23 - Oct. 13; noted on 18 dates, with maximum of 17 at Northwick on Sept. 15.

SA Noted on coast from February to December; generally up to five, but 19, Clevedon - R. Yeo, May 27, and up to nine at Sand Bay in September. Up to six at CVL between Sept. 12 and Nov. 11, and one at Blagdon Reservoir on Sept. 15.

WHIMBREL

NA Spring: five at Nupdown (Hill) and five at Oldbury-on-Severn, May 9; single birds at Littleton Warth on April 29 and May 12, and at Severn Beach - Chittening on April 28 and May 2. Autumn records mostly of single birds: Littleton Warth, July 13 (two) and Aug. 8; Northwick, July 10; Severn Beach - Chittening, July 22, Aug. 3 and Oct. 9 (two).

SA Spring passage from April 16 to May 20, with up to 25, Clevedon to Yeo, 13 at Sand Bay and three at CVL; autumn passage from July 8 to Sept. 4, with up to 19 at Clevedon, five at Sand Bay, two at CVL and one at Blagdon Reservoir.

CURLEW

The table gives the highest monthly counts in the main areas: Severn Beach - Chittening, the R. Avon at Sea Mills, SGW, Clevedon - R. Banwell, Sand Bay, R. Axe Estuary and Chew Valley Lake.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SB/C	85	122	37	25	9	45	120	116	150	134	103	120
Avon	36	28	8	nil	nil	nil	2			14	22	13
SGW		30	1	8	5		38	41				
C/RB	10	60	60	12	2	12	98	117	40	30	20	80
SBay	115	180	120	45	8	40	154	175	228	101	136	140
Axe	110	200	100					1			250	150
CVL	1	1	4	1		2	2	4	8	9	10	9

SPOTTED REDSHANK

A bird ringed at Portbury in August 1973 was shot near Beziers, S. France, in September 1979 - a distance of 1021 km SE.

NA One at ASW, June 15 (BG). One or two noted on coast on five dates, Aug. 22 - Sept. 9.

SA One at Sand Bay, Aug. 26 (RA). Otherwise recorded only at CVL, where one on April 1, June 28 and July 28, up to nine in August, 25 in September, 17 in October and one in November.

REDSHANK

The table gives the highest monthly counts in the main areas, Oldbury-on-Severn, Severn Beach - Chittening, R. Avon (Sea Mills), SGW, Clevedon - R. Banwell, Sand Bay, Axe Estuary and Chew Valley Lake. A pair bred at SGW, and breeding was probable at Clevedon - R. Yeo, Nailsea Moor and Congresbury.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Old.	14	20	46	nil	nil	3	88	42	60	36	11	nil
SB/C	200	200	183	60	1	4	210	200	300	375	250	300
Avon	42	130	85	4			12	1	71	120	100	90
SGW	150	150	200	66	8		1500	50				180
C/RB	50	50	60	40	25	42	130	180	200	200	80	75
SBay	30	120	90				92	135	150	40	130	125
Axe	40	75	35						40	80	60	60
CVL			2	2		1	2	3	4	1	1	

GREENSHANK

NA Noted on coast on ten dates between July 10 and Oct. 18; generally up to five but eight, Oldbury-on-Severn, Sept. 9. One at ASW July 23-27 and one at Sea Mills on Oct. 25.

SA One, Clevedon coast, May 13 - the only spring record. Autumn records from July 13 to Nov. 8, generally of up to five but with maxima of seven at SGW in August; 15 at Clevedon - R. Banwell, six at Sand Bay and nine at Axe Estuary in September; and 30 at CVL in both months, then 11 in October. Single birds noted at Blagdon Res. on Aug. 18 and Sept. 15 and at Bucklands Pool on Aug. 21.

GREEN SANDPIPER

NA One or two at Littleton on Severn on four dates, March 24 to May 6 and up to seven on six dates, July 14 to Oct. 28. One, Aust to Chittening, July 8, two on 23rd and one, Aug. 27-28. At ASW, one often seen from January to March 30, up to four throughout July and August, and single birds on Sept. 24, Oct. 3, Nov. 3 and Dec. 7, two on Dec. 22 and one on 24th. One inland at Hinton (ST77) on Aug. 26.

SA Coastal records from January to April 23 and from late July onwards, usually of up to four birds but with maxima of eight at SGW and 14 from Clevedon to R. Banwell in August, and seven in latter area in September.

Inland records: up to three at CVL from January to April 14 and one on June 20; between July 14 and year-end, the monthly maxima there were 13, 16, 11, 5, 8 and 5. Single birds also noted at Barrow Gurney Resrs. in February and August (and two, Sept. 28), at Blagdon Res. in September and October, at Bucklands Pool, Backwell in July, August and October, at Kenn Moor in February, and at Nailsea Moor and Congresbury in December.

WOOD SANDPIPER

NA Two at Northwick Warth, Aug. 25 (BL).

SA One at CVL on April 25 (MJ), two on July 20 (JSR) and one on eight dates between Aug. 1 and Sept. 9 (eight observers). One at Uphill, Aug. 29 (AJO'N).

COMMON SANDPIPER

NA Winter: one on R. Avon, Sea Mills, from January to March and from Oct. 29 onwards, and one at ASW in January and December. Spring passage, April 24 - May 9, with one or two on coast, three at Sea Mills from April 24-30 and up to seven there from May 2-9. Autumn passage from July 10 to Oct. 11, with up to eight on the coast, up to five at ASW and up to even at Sea Mills; four on R. Avon at St Philips, Bristol, Aug. 19.

SA Winter: at CVL, one or two in first half of January and single birds from late October to end of year; one, Clevedon coast, Dec. 2. Spring passage: birds noted April 11 - June 27, with maxima of three on coast, 17 (on April 1) at CVL, four at Blagdon Res., three at Barrow Gurney Resrs., three at Bucklands Pool, Backwell and seven on R. Avon between Keynsham and Saltford. Autumn passage: July 8 to early October, with maxima of 17 at SGW in August, 11 on Clevedon coast in August, nine in Axe Estuary (on Sept. 1), seven at Barrow Gurney Resrs. and two at Blagdon Res. in August, 21 at CVL in July, then 28 in August and 13 in September (on 1st), four at Bucklands Pool in August and September, and four on R. Avon, Keynsham - Saltford, July 17 - Aug. 24.

TURNSTONE

Data for Sheperdine, Severn Beach and Clevedon are given in the table on the next page. Other records: three at SGW, July 13 to 23rd, and one on Aug. 19; one in April at Sand Bay; one in Axe Estuary on Jan. 6 and two, Oct. 16; single birds at CVL on June 5, July 29, Aug. 25, and five there on Aug. 12.

The table gives the monthly maxima in the main areas, which are Sheperdine, Severn Beach to Chittening and Clevedon:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov.	Dec
Shep.	146	63		36						89	104	30
SB/C	112	92	152	400	250	55	83	200	200	150	90	120
Clev.	15	23	19	25	4	nil	nil	15	25	24	24	27

WILSON'S PHALAROPE

SA One of this Nearctic species was seen at CVL on Sept. 20-21 (JA, MPH, N&LT, KEV); and a first-winter bird was seen there on Sept. 29 - Oct. 4 (RMC, AHD, KEV et al.). Third and fourth records for Avon; all have occurred here in September. /BBRC/

RED-NECKED PHALAROPE

SA One at Bucklands Pool, Backwell on May 26 (HRHL, AFS, TBS); the fifth Avon record (the others were in September 1921, Sept. 1965, August 1969 and May 1978). /BBRC/

ARCTIC SKUA

NA A dark-phase bird was seen off New Passage on July 7 (BL).

SA Single birds at Sand Point, April 28 (TBS) and at CVL (a light phase adult bird) on Aug. 24 (BLK, HRHL).

GREAT SKUA

SA One off Sand Point, April 29 (RA, TBS) and single birds on July 7 and 15 off Brean Down flying up-channel into Avon waters (JP, BR).

MEDITERRANEAN GULL

NA An adult bird in a flooded field at Stoke Gufford, March 18 (PJC) was the first to be reported from North Avon.

SA An adult, Barrow Gurney Resrs., Jan. 6 (AM, KEV). At the CVL gull roost, an adult was seen on Jan. 20, March 11 and 31st, and two on Feb. 24 (KEV et al.); also an adult on Dec. 17 and 30th (MAB, CN, KEV et al.). One at Axe Estuary, Oct. 13-14 (RJP, BR).

LITTLE GULL

NA At the Oldbury Power Station lagoon, two or more immature birds were present between May 24 and June 10, with a maximum of nine on May 28 and June 10; seven present on May 26 left at 18.15 hrs, flying west across the river and then following the shoreline to the south-west(TGE, JDRV).

SA At CVL, a sub-adult bird was noted on April 1, two-three adult birds on April 13-14 and seven adults on May 5; from two to six juvenile birds were present in August, and ten on Aug. 24, then three or four from Sept. 3 - 8, and also two adults on the latter date. One, Sand Bay, Oct. 6 and 7 (TBS).

BLACK-HEADED GULL

NA The table shows the monthly maxima of daily counts at Chittening by RGT and at Sea Mills by HER. The figures illustrate the decline of the winter flocks and their subsequent build-up, as well as a strong passage movement in August and September.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Chit.	2000		400	80	5	140	250*1200		1000	600	300	2000
Sea M.	1000	1600	650	20	15	70	300	1700	1900	70	400	1800

* 250 on July 6 and 2700 on 20th

SA Regular counts by EVS at Bucklands Pool, Backwell showed maximum numbers of 320 in March and 625 in December.

The roost at SGW held some 2,000 on Jan. 8 (as in late 1978) but some 9,000 - 12,000 on 25th. The additional birds had probably moved from the CVL roost when the reservoir froze; there were only some 8,400 there in early February, compared with 20,000 or so in late 1978. Autumn counts at CVL showed some 14,500 at roost in September and 17,500 in December.

COMMON GULL

NA A maximum of 10 - 17 were present in mid-winter in the Severn Beach area, but 28 on March 28 (RGT). Flocks in the Iron Acton - Tytherington area on March 15 well exceeded the winter total, indicating a movement through the area (JDRV). In September a few flocks totalling 1,500 were noted near Marshfield and Tormarton.

SA At Saltford, usually only one or two are seen, but there were 77 on March 15 and 21 on the 25th (JWD), indicating a passage movement. At Portishead, some evidence of a passage to the SW, April 1 - 17, with a maximum of 74 (37 adults) on the 1st (TBS). This is an unusual passage direction, and could perhaps indicate a return of birds to Irish colonies. At Brean Down, Som., some 800 (presumably migrants) flew along the N side of the Down and out to sea in strong NW winds, near noon on March 28 (JSR), and probably entered Avon waters.

At the CVL roost, 12,800 were present on Feb. 4, declining to 100 by April 2; 50 in late September and nearly 12,000 in December.

LESSER BLACK-BACKED GULL

NA Flocks noted included 112 feeding at a pig swill unit near Iron Acton in July; 230 on plough at Cold Ashton on Aug. 26 and two flocks totalling 110 adults near West Littleton in September. Two dark-mantled birds, probably of Scandinavian origin, noted at Rangeworthy, March 10 (JDRV).

In Bristol, at least 52 pairs nesting, most within a quarter mile radius; total of 173 adults or sub-adults was present within the area St Mary Redcliffe - Temple Meads - Tower Hill - Wine St - Baldwin St (AGSG). Last estimate of nesting pairs was of c.50 pairs in 1977.

SA A survey in Bath in 1978 showed 13 nests, 31 eggs laid, 19 young hatched and 15 fledged (Bath NHS, per RMC).

Two pairs nested on rooftops at Portishead Docks ((MD, GY). At the CVL roost, 150 counted on Feb. 4 and 4,200 on Sept. 30, but only some 400 at year-end. Some 50, Barrow Gurney Resrs., March 10. Dark-mantled birds noted at Hartcliffe, Bristol (one, Jan. 2 - PJC), at CVL (one, Jan. 7 - KEV; and two, March 17 - RMC); and at Bucklands Pool, Backwell, April 12 - 14 (two - SMT); see page 4.

HERRING GULL

NA Sixty-five (29 immature) on plough near Winterbourne, Sept. 15 - the only large flock reported except those at rubbish tips (see below, p. 32); 25 with Lesser Black-backs at Cold Ashton, Aug. 26. In Bristol, at least 63 pairs bred in the area described under the previous species; a total of some 300 birds counted there (AGSG). In 1977, 54 nests were located here with an estimated 325 adults.

SA A survey in Bath in 1978 showed six nests, 16 eggs laid, 14 young hatched and 13 fledged (Bath NHS, per RMC).

At Portishead Docks, 94 pairs nested on rooftops (MD, GY). At the CVL roost, only 35 were present on Feb. 4, and 700 in December. The largest inland flocks reported were 60 at Barrow Gurney Reservoirs on Aug. 26, a total of 94 near Failand on Sept. 30, and 38 at Ashton Gate, Bristol on Oct. 14. On a day visit to Steep Holm on July 14, at least 80 adult birds were seen to be dying or dead (JDRV); the cause was unknown. An adult was seen at Bristol Zoo on July 30, taking scraps of fish fed to seals. (SBE). Two adults with dark mantles and yellowish-green legs were noted at SGW on April 9 (MTD); another dark-mantled adult with yellow legs was at CVL on Dec. 17 and 30 (KEV). See page 4.

HERRING/GLAUCOUS GULL

SA On Jan. 11, 1978 KEV studied an adult bird at the CVL roost which resembled an adult Herring Gull except that its left wing showed almost no black, only slight sub-terminal dark markings, and its right wing showed less black than normal for a Herring Gull. The bird was possibly a Glaucous/Herring hybrid; hybrid Glaucous gulls are not infrequent at some Icelandic colonies.

GREAT BLACK-BACKED GULL

NA Recorded on the coast in most months, with one or two at Oldbury Power Station lagoon and Northwick Warth, and up to five from Severn Beach to Chittening, with eight there on July 8 (RGT).

SA Two at SGW, Jan. 21; a pair, Portbury, April 27; two at Brislington, Bristol on May 14 (PGF); one or two all year, Clevedon to Yeo Estuary; one, Bucklands Pool, Backwell, Feb. 18 and one in Axe Estuary on June 30. Two or three in most months at CVL, but up to six in February and four in December.

KITTIWAKE

NA Some 200 over R. Severn, Severn Bridge - Aust, on March 9 (NTL), after night of strong winds.

SA Birds were noted off Portishead, Sand Point or entering Avon waters off Brean Down between March 17 and Aug. 17; numbers ranged from one to 120 (on April 19), with most in April and a maximum of 30 thereafter. An immature bird was found dead on the tideline, Sand Bay, Dec. 21 (RA). At CVL, an adult, March 17 (N&LT); four on April 21-22 (RP, KEV); a first-summer bird on May 25 (KEV); an immature bird, Aug. 13-17 following gales (AHD, PAG, BJ) and another on Nov. 10 (KEV).

GULLS AT REFUSE TIPS

On Feb. 10 a co-ordinated count was made at Avon County refuse tips with the following results (AGSG):

	B-headed	Common	Lesser B-b.	Herring	Gt. B-b.
Almondsbury	450+	20	10	80	1
Bury Hill	600	34	28	14	0
Stockwood	375	65	11	5	0
Warmley	15	0	0	0	0
Failand	450	2	9	125	0
Hutton Moor	675	0	2	3500	0
South Stoke	6	1	0	10	0

GULLS AT ROOSTS

In December 1979 and January 1980 the Avon Gull Study Group carried out counts at all known roost sites in Avon, with the following results:

	B-headed	Common	Lesser B-b.	Herring	LBb/H**	Gt. B-b
Oldbury	2,675	182	4	14	5	1
Avonmouth	4,900	25	40	30	nil	15
Clevedon	520	nil	nil	20	nil	nil
Yeo Estuary	1,360	nil	nil	20	nil	nil
Axe Estuary	1,500	30	5	nil	nil	2
Steep Holm*	nil	nil	8	1,025	nil	5
CVL	17,650	11,750	420	700	250	4
Total	28,605	11,987	477	1,809	255	27

Notes ** These are immature birds in which the species cannot be distinguished

* The Steep Holm figures are based on counts from Anchor Head and Brean Down of birds feeding in Avon and flying out to roost on Steep Holm. The island is also used by gulls feeding in Glamorgan, so the figures do not represent the Steep Holm roost totals.

SANDWICH TERN

SA No spring records. At CVL, one on Aug. 17 (PA, BJG) and three, Sept. 30 (TBS). Birds seen off Portishead, Yeo Estuary, Axe Estuary or (entering or leaving Avon) off Brean Down: eight, Aug. 25 (BR); one, Sept. 16 (MSK); two on 23rd (TBS) and three to SW on 29th (RA).

COMMON TERN

Small numbers on coast, mainly in NA, from May 6-29 and June 17 - Aug. 4; maximum of four together was at Oldbury on Severn, May 29. At CVL, small numbers from April 17 (one early bird) to May 19; autumn passage from June 29 to Sept. 29 - four in July, up to five in August, 16 on Sept. 8 then up to three.

COMMON TERN or ARCTIC TERN

Noted on coast, May 6 - June 3, with maxima of 27 moving up channel off Brean Down, May 6 and ten at Oldbury on 24th, otherwise up to five. Two, New Passage, Aug. 10. At CVL, single birds were noted from April 21; large influx on May 1 - some 110 present; from that date, five to ten noted until July 10; small numbers present in August and September, the last (three) on Sept. 9.

LITTLE TERN

NA One, Northwick, May 19 (RGT); two, Severn Beach, Aug. 25 (BL).

SA One, Sand Point, May 7 (TBS); three, Blagdon Res. (SBE) and three at CVL (CFD), both on Sept. 23.

BLACK TERN

SA Spring passage recorded only at reservoirs, May 12 (two) - June 2 (one); large influx on May 13 - morning count of 13 at CVL reaching 76 by evening, also 13 at Blagdon.

Autumn passage, late June - Sept. 24, noted mostly at CVL, where many parties of up to 14. Single birds at Barrow Gurney Resrs., Aug. 19 and in Yeo Estuary, Sept. 2.

WHITE-WINGED BLACK TERN

SA At CVL, a juvenile bird was present from Sept. 7-10 and a second from the 8th-10th (AHD, RGT, KEV). At the Yeo Estuary a juvenile bird was seen on Aug. 19 (HER). /BBRC/

LITTLE AUK

NA One found exhausted at Tockington on Dec. 17 died on 18th (AEB).

STOCK DOVE

Reported throughout the year from many areas; breeding noted at 11 sites in NA and ten in SA; largest flocks reported were 36 at Littleton Warth (NA) on Oct. 28 and 50 at CVL (SA) on Dec. 10.

WOODPIGEON

Widespread reports throughout year; large winter flocks noted at Chittening (NA), with up to 200 in January, February and December; and at Kenn Moor (SA) with 300+ on March 17.

COLLARED DOVE

Well distributed throughout county. Large counts received: 38, Hambrook (NA), Sept. 22; and from SA, 39 at Sand Point, Sept. 22 and 78 a week later, 130 at Bleadon, Oct. 13, falling to some 30 on Nov. 17. These suggest a considerable movement.

TURTLE DOVE

Reported in period May 7 - Sept. 18, from seven locations in NA and 17 in SA.

CUCKOO

Widespread records received covering period April 14 - Sept. 13.

BARN OWL

NA Single birds reported from Thornbury, Pilning, the M5 (N. Bristol) and Lawrence Weston.

SA Reported from Corston, Claverton, Kelston, Odd Down, Keynsham, Blagdon, CVL, Gordano valley, Redhill and Weston-s-Mare.

LITTLE OWL

Reported from 19 locations in NA (with breeding at three sites) and from 23 locations in SA.

TAWNY OWL

Undoubtedly under-reported. Records cover nine localities (with one breeding site) in NA and 19 (with two breeding sites) in SA.

LONG-EARED OWL

SA One at CVL, April 21-28 (CN, KEV) - third record for Lake. One at Sand Point, Oct. 27 (TBS).

SHORT-EARED OWL

NA One - two, Aust to Avonmouth, from January to late spring (one seen at Chittening as late as June 12), and from October to December.

SA Two at SGW, January to April and in December - possibly the NA birds. Single birds noted from Yeo Estuary to Axe Estuary in January to March, at Clevedon and Sand Point in May and October to December, and inland at Whitchurch and CVL in February.

NIGHTJAR

SA A bird found exhausted at Keynsham, revived and released, May 15 (MJW). One heard at Wraxall on late dote of Sept. 8 (HLH).

SWIFT

Well distributed throughout county. Earliest record was at CVL on May 2, where numbers reached 10,000 on June 22 and 5,000 on the 24th and 30th. Last report: one, Clevedon, Oct. 6.

KINGFISHER

Reported from all parts of the county, but breeding proved only at two sites in SA.

HOOPOE

NA Two, Blaise Woods, Bristol, April 19 then one until 30th (MD),

SA Single birds noted at Uphill on April 13, 14 (JJ, RS), at CVL on May 14 (per RJP) and at Sand Point on June 4 (RA, GWR).

WRYNECK

SA One at Sand Point, April 14 (GWR).

GREEN WOODPECKER

Resident; reported from 23 NA and 40 SA localities.

GREAT SPOTTED WOODPECKER

Reports from many localities throughout year.

LESSER SPOTTED WOODPECKER

Reports from, in NA, Hawkesbury, Coalpit Heath, Winterbourne Down and in Bristol from Moorgrove Wood (Henbury), Snuff Mills, Vassalls Park, Stoke Bishop, Durdham Down, Clifton; and in SA, Brislington (Bristol), Corston, Combe Down, Saltford, Leigh Woods, Abbots Leigh, Clevedon, Cleeve, CVL and Bishop Sutton.

WOODLARK

Uncommon passage migrant; noted in SA at Sand Bay, March 11 and Kenn Estuary, May 27 (single birds); and at Portishead, Sept. 17 and Portbury Wharf, Oct. 21 (two birds). (AH, WJH, HER).

SAND MARTIN

Recorded from March 26 to Oct. 27; did not breed at usual site in Glenfrome Rd, Bristol (NA); the only breeding record was of 11 pairs at Somerdale, Keynsham (SA), most rearing two broods.

RICHARD'S PIPIT

SA One, Steep Holm, Sept. 17, (AJP, DER). /BBRC/

TREE PIPIT

Reports of up to 22 migrants, April 10 - May 8 and Aug. 21 to Oct. 20 from five localities in NA and ten in SA. Breeding season records from Brockley Combe, Rowberrow, Clevedon and Sand Point, all in SA.

ROCK PIPIT and WATER PIPIT

NA Recorded on coast and on R. Avon at Sea Mills, January to March and October to end of year.

SA Bred at Sand Point. Water Pipits (up to eight) reported from Barrow, Blagdon and Chew Valley Reservoirs, January - April 9 and Sept. 30 - Dec. 31.

YELLOW WAGTAIL

Summer visitor and passage migrant. In NA, nine reports of up to eight birds between Littleton on Severn and Avonmouth. In SA, 127 reports, from SGW, Portishead, Clevedon, Nailsea and Kenn Moors, Sand Bay, Kewstoke, Uphill, CVL (where one bird remained into 1980), Chew Magna, Hunstrete, Compton Dando, Keynsham and Saltford.

PIED WAGTAIL

Common and widespread resident. Winter roosts in Bristol: 300 - 400 in Broadmead area, January and December, and 58 in Cumberland Basin area, Dec. 18. Pre-roost gatherings of 1,000 birds at Oldbury Power Station, December. At least 80 feeding on grazed kale field, Saltford, Dec. 10-20. Up to seven White Wagtails noted on coast and at reservoirs, April 5 - May 13.

DIPPER

One or two noted in NA at Shockerwick, Bitton, Huntingford and Snuff Mills, Bristol; and in SA at Winford (the only breeding record), Rickford, Wellow, Combe Hay and Midford.

NIGHTINGALE

Breeding-season reports of up to 12 from Thornbury, Charfield area, Kilcott, and Inglestone and Hawkesbury Commons (NA); and from Gordano Valley, Sand Point and Wellow (SA).

BLACK REDSTART

NA Reports of single birds, Jan. 3 - March 31, from Northwick Warth, Avonmouth, Clifton and City Docks (Bristol).

SA One, Compton Dando, March 31 and one, Clevedon, Oct. 28.

REDSTART

Passage migrant and decreasingly common summer visitor. Reports (26), April 11 - Oct. 7, of up to four, mainly birds on passage, from Hill*, Cromhall, New Passage, Filton and in Bristol from Stoke Park and Eastville (NA); and from Redcliffe St, Bristol (where a male was found dead on Sept. 24), Ashton Park*, Clevedon, Sand Point, Woodspring Bay, Publow*, Queen Charlton, Saltford and Odd Down (SA). Breeding season records marked *.

WHINCHAT

Passage migrant and uncommon summer visitor. Reports of up to five birds, April 15 - May 18 and Aug. 4 - Oct. 20, from Hawkesbury Common, Marshfield, Littleton Warth, Chittening and Filton

in NA; and from Stockwood, Ashton Marsh, Nailsea, Kenn Moor, Clevedon, Sand Bay, Uphill, Chew Magna, CVL and Marksbury in SA. No proof of breeding.

STONECHAT

Reported in all months, but in much smaller numbers than usual. Successful breeding reported at Whitchurch and Burrington.

WHEATEAR

Numerous reports from 30 areas (15 in NA) of up to 15 birds on passage, March 18 - June 14 and July 3 - Oct. 28.

RING OUZEL

Uncommon passage migrant.

SA Two, Sand Bay, April 8, and seven, Shiplate Slait, April 13.

GRASSHOPPER WARBLER

Reports (46) of singing males, in NA from Hawkesbury, Inglestone Common, Tytherington, Thornbury, Tockington, Aust, Severn Beach, Chittening, Avonmouth, Lawrence Weston and Filton, and in SA from Sand Point and Bleadon, covering April 10 to July 26.

MARSH WARBLER

SA Single males of this rare summer vagrant were seen at CVL (AHD, KEV) and in the Gordano Valley (JWB), on May 19 and 20.

MELODIOUS WARBLER

SA One of this rare summer vagrant was seen at Sand Bay, Sept. 29 (TBS).

BLACKCAP

Passage migrant, summer visitor and increasingly common resident. Numerous records from country, town and city gardens in winter; nine ringed in December at Sneyd Park, Bristol (HRHL).

WOOD WARBLER

Up to five singing males noted, April 29 - July 1, in NA from North Stoke and Lansdown and in SA from Knowle (Bristol), Ashton Park*, Clarken Combe, Leigh Woods*, Abbots Leigh, Gordano valley, Sand Point, Brockley and Burrington Combes, and Rainbow Wood, Bath. Breeding confirmed where marked *.

CHIFFCHAFF

Passage migrant and widely distributed and common summer visitor; small numbers winter.

FIRECREST

Uncommon vagrant. Single birds recorded at Sand Point (SA) on eight dates between Oct. 21 and Dec. 29 (GWR, TBS, JW).

PIED FLYCATCHER

Single birds noted on passage, April 10 - May 13 and Aug. 3 - 11, in NA at Yate, Coalpit Heath, Vassalls Park (Bristol), New Passage and Severn Beach; and in SA at Leigh Woods, Abbots Leigh, Gordano valley, Sand Point and Hunstrete.

BEARDED TIT

SA Winter vagrant. Single birds recorded at CVL, Jan. 7 - Feb. 3 and up to nine there, Nov. 10 - Dec. 24 (eight trapped and ringed).

WILLOW TIT

Uncommon resident. The only record received was of one in Leigh Woods on Oct. 25. Confirmatory details are requested for records of this species.

GOLDEN ORIOLE

Rare summer vagrant. A female bird was found dead at Tockington, May 31 (AEB).

GREAT GREY SHRIKE

Rare winter vagrant. One between Clevedon and the Kenn Estuary, Oct. 28 (KJH).

CARRION CROW

Common resident. A Hooded Crow was noted at SGW, Oct. 24 (MD).

RAVEN

Regular visitor in small numbers. One or two reported in NA at Cromhall and Falfield, Jan. 26 - 30 and Aug. 22 - 27 (JH), and single birds in SA at Weston-s-Mare, Feb. 3 (RA) and at Sand Point on May 27 (PBK).

BRAMBLING

Noted at numerous NA and SA localities, on coast and inland, with flocks of up to 250, Jan. 6 - April 28 (88 reports) and up to 40, Oct. 6 - Dec. 25 (35 reports).

SISKIN

Widespread in NA and SA; 30 reports of up to 65, Jan. - April 15, and 39 reports of up to 35, Oct. 5 to end of year.

TWITE

Up to 35 noted on coast between Severn Beach (NA) and Yeo Estuary (SA), January to April 8 and Nov. 11 to year-end. Inland records of two, North Widcombe, Jan. 28 (KEV), one, CVL, Feb. 24 (N&LT) and six, Weston Moor, Dec. 29 (HER).

REDPOLL

Reported from 19 NA and SA localities, January to May 29 and Aug. 27 to Dec. 31; no evidence of breeding.

CROSSBILL

Single birds noted in NA at Hallen, Dec. 3 (NTL) and in SA at Abbots Leigh, Nov. 15 (TBS).

HAWFINCH

Up to four birds reported, Jan. 6 - May 2 and June 17 - July 28, in NA at Inglestone Common, Henbury, and Durdham and Clifton Downs, Bristol; and in SA at Leigh Woods, Abbots Leigh, Cadbury Camp, Weston-s-Mare, Chew Valley Lake and Freshford.

LAPLAND BUNTING

SA One seen at SGW, Jan. 6-13 (AH. AM, GP, GJU, KEV).

CIRL BUNTING

SA One, Sand Point, May 6 (TBS). Formerly bred regularly; now infrequently reported.

CORN BUNTING

Up to ten singing males reported, in NA from Hillesley, Tormarton, West Littleton and Marshfield, and in SA from Bleadon Hill, CVL and Burnett.

OTHER COMMON OR REGULARLY OCCURRING SPECIES PRESENT:

Residents: Pheasant, Skylark,* Meadow Pipit, Grey Wagtail, Wren, Dunnock, Robin, Blackbird, Song Thrush, Mistle Thrush, Goldcrest; Long-tailed, Marsh, Coal, Blue and Great Tits; Nuthatch, Treecreeper, Jay, Magpie, Jackdaw, Rook, Starling, House Sparrow, Tree Sparrow, Chaffinch, Greenfinch, Goldfinch, Linnet, Bullfinch, Yellowhammer, Reed Bunting.

Summer or winter visitors: Swallow, House Martin, Fieldfare,* Redwing,* Sedge,* Reed* and Garden Warblers; Lesser Whitethroat, Whitethroat, Willow Warbler, Spotted Flycatcher.

* referred to in Foreword

ERRATA AND ADDENDA, 1978 REPORT

Page	Species	
5	Great Northern Diver	For Dec. 23 read Dec. 3.
7	Canada Goose	Last line should read: B. c. minima.
10	Tufted Duck	In line 7 insert 490 after Total.
11	Ruddy Duck	In line 6 amend 305 to 325.
21	Turnstone	Add: SA Noted on coast all months; over eight only near Clevedon, where 20-30 up to April and 10-25 from August. At CVL, single birds, May 13, Aug. 5 and 16th, and Nov. 11.
22	Mediterranean Gull	Line 5 should read: Dec. 3 and 30th.
22	Little Gull	Add: NA One, Severn Beach, May 1 and 6th.
22	Black-headed Gull	In line 14, June 8 should read Aug. 6.
24	Glaucous or Iceland Gull	For June 2 read Feb. 6.
24	Common and Arctic Tern	After "often reported" add: 26 Arctic on Aug. 20.
25	Little Tern	Under NA add: 10, New Passage on May 2 (RGT).
25	Black Tern	Add: At Blagdon Res., five on Aug. 2, one on 20th, one on Sept. 16-17 and four on 26th.

CONTRIBUTORS:

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KESTRELS IN THE CITY OF BRISTOL

R. L. Bland

Between 1970 and 1979 I have conducted a survey on behalf of the B. N. S. Ornithological Section to assess the resident Kestrel population within the 12,000 hectares of the city of Bristol. In spite of their obviousness when hovering, Kestrels are quite elusive when close to their nest sites, and surprisingly few records may be produced by a pair nesting in the heart of a busy city. It is indeed most unusual to see more than one bird of a pair after display and mating (which often takes place very close to the nest site) until family groups of three or more birds appear in July. Thus a record of a single bird between March and the end of June is possible evidence of a breeding pair, and if single birds are recorded in the same locality during three of the four months of the breeding season this has been taken as sufficient evidence that a breeding pair is present. This criterion follows that used in Sussex (Shrubb 1970).

The survey method has been to request B. N. S. members to send in all records of Kestrel sightings within the city during the four months; typically this elicits about 100 records. These are plotted on a 1:50,000 Ordnance Survey map, and the points soon fall into clear groups. Additional evidence, such as a pair seen displaying or mating, or a bird carrying food, or a family party together, has often been available. Inevitably, many of the sightings submitted refer to a relatively few pairs whose nesting places put them in the public gaze. To counteract the bias this creates, I have made an attempt to cover most of the city personally each season.

Kestrels tend to be loyal to a nest site - certainly one has been used in ten consecutive years - so the knowledge acquired has been cumulative. As more and more actual sites have been discovered, it has been possible to allocate sightings to specific pairs and to concentrate attention on observations that do not fit the pattern. Most difficulty has been found in the central area, within 1 km of Bristol Bridge. This area, with its derelict dock and railway land, holds so many Kestrels that it is exceptionally hard to match pairs and sightings. By 1978, thirteen nest sites were known and there was evidence of nineteen other pairs, but not more than twenty-two territories had been held in any one year. There were fewer records

in 1979, and at least three of the 1978 sites were not used. Eleven sites were occupied, however - ten of them in a 2,000 ha zone around the city centre, and three other pairs probably bred. (1979 seems to have been a poor year for Kestrel breeding, both in the city and in rural Avon).

Published data on the area required by a Kestrel pair vary from 5810 ha in London (Montier 1968) to between 900 and 250 ha in Sussex (900 on the Weald, 550 in Brighton and 250 on the Marsh)(Shrubb 1968). In suburban N. W. Kent, Burton (1950) found 850 ha. In rural Avon, Taylor (1967) found 2300 ha, averaged over three years, with an absolute maximum of 1800 ha. The figure for the whole of Bristol is 500 ha at the most, and only from 180 to 200 ha in the central area, apparently the highest density recorded. The Common Bird Census of the British Trust for Ornithology suggests that nationally there were 50% more Kestrels in 1977 than in 1966, but this is not enough to explain the fourfold difference between Kestrel density in Bristol now and in rural Avon in 1966. It may be that an urban area, with decayed buildings for nest sites and extensive derelict land where rodents and small birds may be readily caught, can provide a far better environment for Kestrels than an intensively cultivated rural area, in which the tree nest sites are often disputed with other species.

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THE STATUS OF WADERS ON SEVERNSIDE

R. G. Thomas

The shoreline of the River Severn between the southern end of Chittening Warth and the northern end of Aust Warth, a stretch of about eight kilometres and generally known as Severnside, supports a considerable number of waders on passage or wintering. The shore can be divided into three sections, which differ in significance to the wader population, viz.-

(a) the southern part, from Chittening to Severn Beach;
(b) a central section, between Severn Beach and New Passage;
(c) the northern section, comprising Northwick and Aust Warths.

The southern section supports the greatest number and variety of waders, because the ebbing tide very quickly exposes a considerable expanse of mudflats and gravel beds and banks. This section, which is about four kilometres in length, I shall generally refer to as Chittening, unless for a particular species that part near Severn Beach is of special importance. The central section, (b), is protected by a sea wall and at low tide very little mud is to be seen, the river bed being mainly covered by stones and gravel. Very few waders inhabit this part of the shoreline. The northern section, a distance of about three kilometres, supports fewer waders than the Chitteing section. Here the river bank is steeper and the ebbing tide takes longer to expose the mudflats, which at low tide are not as extensive as at Chittening. I shall refer to this section as Northwick unless Aust Warth is of particular significance.

Since 1968 I have regularly watched the waders of Severnside and have kept detailed records. From the information so obtained and from the records of others submitted for inclusion in the Avon (formerly Bristol) Bird Report, the present status of the waders of Severnside has been assessed, and is set out below in systematic order.

OYSTERCATCHER

An irregular visitor which has been recorded in all months. Numbers seldom exceed five but as many as 24 have been seen together.

LITTLE RINGED PLOVER

A rare passage visitor, not recorded until 1971. From then until 1979 it has been recorded on eight occasions, twice in the spring and the remainder in autumn. Three were seen together in August 1973; the other records were all of single birds.

RINGED PLOVER

A passage and winter visitor, the highest numbers occurring in autumn when counts of 600 are not unusual; as many as 1,500 were present in 1969. A few birds, probably non-breeders, may be present from mid-June to mid-July. The wintering population is generally between 20 and 50 birds.

KENTISH PLOVER

A very rare passage visitor, the only records being of single birds at Severn Beach in May 1947, May 1949 and August 1978.

DOTTEREL

Recorded once only - a single bird at Severn Beach from Sept. 14 - 17, 1974.

GOLDEN PLOVER

An irregular and uncommon passage and winter visitor in small numbers, mostly seen from August to October with Lapwing flocks.

GREY PLOVER

A passage and winter visitor in small numbers, generally not more than ten birds, though as many as 100 together have been known.

LAPWING

Highest numbers occur on autumn passage, when flocks of 1,000 may be seen at Northwick. In winter fewer are normally present, but as many as 5,000 may be in the area during very hard weather. Numbers at Chittening seldom reach 100 and are generally much less. The species has been recorded in all months, but very few are to be seen from March to June.

KNOT

An irregular passage and winter visitor, though it has been seen in every month. Flocks are usually under 20, but passage flocks from August to October have varied from 100 to 500 birds.

SANDERLING

A regular visitor on spring and autumn passage; there are two records also of single birds at Severn Beach in December. Numbers on passage seldom total as many as ten, but up to 23 have been recorded, and 80 on one occasion - in August 1972.

LITTLE STINT

Recorded in spring and autumn of most years, in very small numbers. Most sightings occur at Severn Beach, where a flock of fourteen was seen on one occasion. There is one winter record - a single bird present in December 1976.

CURLEW SANDPIPER

Mostly seen at Severn Beach during autumn passage, generally in ones and twos, though as many as fourteen together have been seen. In May 1978 single birds were seen on three dates, the first spring records since 1950. There is one winter record - a single bird, present in December 1978.

PURPLE SANDPIPER

A regular passage and winter visitor to Severn Beach, where it has been recorded from late October to late May. In spring, up to eleven have been seen together, but wintering birds usually do not exceed five.

DUNLIN

A passage and winter visitor and the most numerous wader to visit Severnside. The wintering population reaches 4,000 to 5,000 in most years, but up to 7,000 has been known. A few non-breeding birds are sometimes present between mid-June and mid-July.

RUFF

A very infrequent visitor on autumn passage, generally in ones or twos, but twelve together have been seen at Northwick.

JACK SNIPE

Recorded from September to March, with most records from Aust Warth, where up to twelve have been seen, but single birds may be found along the whole shoreline. The species has been much less frequent during the last two winters than previously.

SNIPE

A regular passage and winter visitor. Most records refer to single birds well spaced out; parties are seldom reported.

DOWITCHER sp.

One was seen at Aust Warth in October 1977, the details not being sufficient to differentiate with certainty between the Long- and the Short-billed species.

WOODCOCK

There are two records of single birds at Chittening, in November 1961 and February 1980.

BLACK-TAILED GODWIT

A scarce passage bird seen more often in autumn than in spring, and occasionally recorded in winter. Numbers rarely exceed twenty but there are two records of flocks in excess of a hundred.

BAR-TAILED GODWIT

A frequent visitor on spring and autumn passage, usually in parties of fewer than fifteen, though in spring flocks of up to 50 have been seen on odd occasions. Small numbers are sometimes seen in winter. The species has been recorded in all months.

WHIMBREL

A passage visitor recorded annually from mid-April to the end of May and again from the second week of July to the end of August, with one record for June and one for October. The great majority of records relate to single birds, but it is not unusual to see up to five, and on one occasion ten were seen together.

CURLEW

A passage and winter visitor, with a few non-breeding birds remaining between mid-April and mid-June in some years. The average wintering population is about 100, and passage counts can at their peak reach 200 birds.

SPOTTED REDSHANK

An infrequent passage visitor, seen more often in autumn than in spring, and more often at Northwick than at Chittening. Most records relate to single birds and none to more than three.

REDSHANK

A passage and winter visitor, with a few non-breeding birds remaining in some years between mid-April and mid-June. The normal wintering population is about 250 birds, and peak counts in autumn passage have reached 500 to 600.

GREENSHANK

An uncommon passage migrant recorded in May and from July to October, but not annually. Most records refer to single birds but five together have been seen.

GREEN SANDPIPER

An uncommon passage migrant recorded in March and from July to October, but not seen every year. Most records are of single birds, and all relate to birds flushed from the several pills which run into the river.

WOOD SANDPIPER

A rare autumn migrant. The first record was in August 1967, with others in July 1971, August 1977, October 1978 and August 1979. All related to single birds except the last one, which referred to two birds seen on one occasion.

COMMON SANDPIPER

An annual spring and autumn migrant, seldom in parties of more than three birds, though up to six together have been seen. This species is sometimes found along the open shoreline, but the great majority of records are of birds flushed from the pills.

TURNSTONE

An annual passage and winter visitor, with a few non-breeding birds remaining in some years between mid-June and mid-July. The usual wintering population is about 100 birds, and peak passage counts are generally 200-250, but 400 has been known. The main feeding area is on the gravel beds between Severn Beach and the I.C.I. outfall at Chittening, and less often on the rocky, weed-covered shore below the sea-wall at New Passage, but some birds may at times be found feeding on the open muddy shoreline in any part of the area.

GREY PHALAROPE

Not recorded since one was seen off Severn Beach, September 1951.

BY A. J. WILLIS

(Department of Botany, University of Sheffield)

Overall the weather in 1979 was distinctly cold, with extremely severe conditions at the start of the year, fairly wet, but slightly more sunny than usual, although there was a rather poor summer. On average for the year, the temperature was 0.9°C colder than normal, the first six months being all below average temperature. It was particularly cold, with much snow, during January, February and March, the January temperature at Long Ashton Research Station (to which all meteorological records relate) dropping to -11.6°C, and the average for the month, in spite of well above normal sunshine, being little above freezing point (3.8°C colder than usual). Soil temperatures at 10 cm during January and February averaged only 1.1°C. Only July and the end of the year (October to December) were of above normal temperature, the last six months being fairly sunny. Total rainfall for the year was 969.2 mm, some 105% of average, March and May being particularly wet months, with about double the normal rainfall. July was the warmest and driest month, being sunny, with about one-third the average rainfall. The year ended relatively warm and sunny, although December was a wet month.

After the prolonged severe winter, not surprisingly the flowering season was a very backward one. Early flowering plants were at least a month late. Snowdrops in Compton Martin Wood, at Uphill and along the River Chew at Coley were not at their best until towards mid March. At Upper Langford *Helleborus viridis* was only just showing above ground at the beginning of March and *Daphne laureola* in Cheddar Wood was only in bud; also by 21 March *Hornungia petraea* was still at the bud stage in Leigh Woods (*R.S.C.*). The lateness of the season long persisted; in mid June at Cheddar very few plants of Cheddar Pink were in flower, *Galium fleurotii* and *Sedum forsterianum* were still in bud, while *Cochlearia officinalis* was still flowering both on the high cliffs and at the base (*P.J.M.W.*). On the other hand, *Tulipa*

sylvestris flowered at Charfield at its usual time of the last week in April and early May; this plant is reported never to vary in its flowering time whatever the weather conditions (*R.S.C.*).

In a paper by D.E. Allen entitled 'The botanical family of Samuel Butler' in the *Journal of the Society for the Bibliography of Natural History*, Vol. 9, Part 2 (April 1979), pp. 133-136, reference is made to Rev. Thos. Butler. White (*Flora of Bristol*, p.633) records that Rev. Thos. Butler appeared to be the first to notice *Carex humilis* on Brean Down (in 1841). He was the son of the classical scholar Dr. Samuel Butler, famous as headmaster of Shrewsbury School (later bishop of Lichfield), and the father of the author Samuel Butler, well known for *Erewhon* and *The Way of All Flesh*. Rev. Thos. Butler married into the Bristol family of Worsley and his sister-in-law Miss Anna Worsley, later Mrs. Russell, supplied H.C. Watson with a catalogue of plants seen near Bristol. It was probably on a visit to his wife's family from his Rectory in Notts. that Rev. Thos. Butler had the opportunity to visit Brean Down.

White in his *Flora of Bristol* (p. 598) notes that *Juncus effusus* from Nailsea was strewn in St. Mary Redcliffe on Whitsundays. At least in the last two years (1978, 1979), the rush strewn was *J. inflexus* and was obtained from Yatton (*P.J.M.N.*). The circumstances of the change are uncertain, but it seems likely that there has been an alteration in the relative abundance of the two rushes, a probable decline of *J. effusus* being perhaps attributable to relative intolerance of drainage or modern agricultural methods (notably weed control).

In connection with conservation work relating to *Allium ampeloprasum* on Steep Holm, bulbs were found to produce offsets freely; it is hoped that it will be possible to increase the numbers of the plant on the island. Investigations on the propagation of *Carex depauperata* show that this plant is very susceptible to grazing (*R.S.C.*).

As in previous years, numerous reports indicate the continued existence of less common species in recorded sites. Examples include *Oenanthe aquatica* at Worle, *Scirpus fluitans* and *Carex rostrata* in Weston Moor, Gordano Valley, and *C. acuta* on the Berrow dunes (*R.S.C.*). Persistent in Leigh Woods are *Campanula trachelium*, *Vaccinium myrtillus* and *Sedum album* (*C.M.L.*). *Euphorbia lathyrus* is still in Home Wood, Warleigh, *Dipsacus pilosus* on the banks of the Chew near Pensford, where recorded by D. Fry in 1896, and *Verbascum virgatum* in Bath (*D.G.*).

Although the Bristol area is one of the botanically best known regions in Britain, interesting records continue to be made, even of native species, and of hybrids involving native species. Among taxa of note reported this year are *Hieracium salticola* at Pensford, × *Festulolium holmbergii* near Portbury Dock, and × *Agropogon littoralis* on the old Glastonbury Tip. The Brislington Tip and the Avonmouth Docks, keenly investigated by A.L. Grenfell and others, have continued to yield many unusual aliens. Among notable plants from the Brislington site are *Chenopodium ambrosioides*, *Panicum dichotomiflorum* and *Eragrostis cilianensis*. At Avonmouth Docks plants very rare in Britain recorded this year include *Amaranthus spinosus*, *Modiola caroliniana* and *Iva xanthifolia*.

In a paper on J.L. Knapp's *Gramina Britannica* by P.J.M. Nethercott in these *Proceedings* for 1976, local records of five grasses are mentioned. C.M. Lovatt reports that in Knapp's bound volume of grasses, presented to the Bristol Institution in 1824, and now in the Bristol Museum, there is a voucher relating to the Bristol area for only one of these records (*Puccinellia rupestris* collected by Knapp at 'Rownham Ferry and Clifton').

During recent work to improve safety from falling rocks on the Portway, a 'Devon Wall' was constructed below St. Vincent's Rocks. The wall, made of wire mesh and filled with rubble, was capped with a soil from 'near Gloucester' and for a brief period was red with *Papaver rhoeas* and *P. dubium*;

other introduced plants included *Iberis umbellata* and *Gnaphalium uliginosum* (*C.M.L.*).

An article by Lynda P. Smith on 'The distribution of common intertidal rocky shore algae along the south coast of the Severn estuary' (these *Proceedings* for 1978, pp. 69-76) gives information concerning the occurrence of sixteen species of common intertidal macro-algae (two green, six brown, eight red) in eleven stations from Sharpness to Kilve.

Names of contributors associated with several records, or with the determination of plants, are abbreviated thus:

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G.W.G., G.W. Garlick	P.J.M.N., P.J.M. Nethercott
I.F.G., Miss I.F. Gravestock	R.M.P., R.M. Payne
G: Gloucestershire	S: Somerset

For details of the area covered by this Report, see *Bristol Botany in 1978*, p. 35.

Equisetum fluviatile L. Pool, East Harptree, S, *R.S.C.*

E. arvense L. A branched form, Malago Vale, Bristol, S, *I.F.G.* Also terrestrial form of *Polygonum amphibium* L. and *Bryonia dioica* Jacq.

Adiantum capillus-veneris L. Large colony, damp rocky banks of old railway cutting, Wells, S, *R.M.P.*

Ranunculus sardous Crantz Avonmouth Docks, G, *A.L.G.* Also *Chrysanthemum segetum* L.

R. trichophyllus Chaix Pool by railway line, Worle, S; also, with *R. circinatus* Sibth., in rhines, Tadham Moor, Somerset Levels, S, *R.S.C.*

Ceratophyllum demersum L. Cheddar Reservoir, S, *R.S.C.*

Fumaria muralis Sond. ex Koch ssp. *boraei* (Jord.) Pugsl. Abundant in potato crop, Market Gardens, Bromley Heath, Downend, G, *A.L.G.* One plant at junction of wall and pavement, Goose Green Way, Yate, G, *G.W.G.* Until recent years this fumitory occurred annually on disturbed ground in this site. Nearby, on a maintained grass verge, was *Trifolium striatum* L.

Rorippa islandica (Oeder) Borbás Cheddar Reservoir, S, *A.L.G.* and *I.F.G.* Also, with *Artemisia absinthium* L., on Bedminster Down Tip, S, *A.L.G.*

R. amphibia (L.) Bess. Riverbank adjoining Keynsham Lock, G, *C.W.H.* Also, established in the stonework of the lock, *Lycopus europaeus* L. and *Scutellaria galericulata* L.

Matthiola incana (L.) R. Br. Flowers white, with lilac tinge, scattered on cliff between Redcliff Bay and Black Nore Point, Portishead, S, *A.F.D.* These plants are probably garden escapes.

Sisymbrium officinale (L.) Scop. var. *leiocarpum* DC. Avonmouth Docks, G, *C.M.L.* and others. Also on disturbed ground, East Wood, Portishead, S, *P.J.M.N.*

Hypericum androsaemum L. East Twin Brook, Burrington, S, *P.J.M.N.*

Silene maritima With. Plentiful and vigorous on slag heaps in plantation, East Harptree, S, *R.S.C.*

S. alba (Mill.) E.H.L. Krause One large female plant with very laciniate flowers, on the bank of the Avon, near Barton Hill, Bristol, G, *A.F.D.* Each petal was deeply split into four, the two central segments being themselves forked.

Dianthus deltoides L. Bedminster Down Tip, S, *A.L.G.* Also *D. barbatus* L.

Spergula arvensis L. Bridge Valley Road, Avon Gorge, G; also introduced with trees planted on Ladies Mile, Clifton, and Durdham Downs, G, *C.M.L.*

Scleranthus annuus L. Two plants, with *Euphorbia exigua* L., grassy bend of Bridge Valley Road, Avon Gorge, G, *C.M.L.* *S. annuus* has not been

seen on Brandon Hill in recent years.

Chenopodium polyspermum L. Camerton, S, and also Claverton, S, *D.G.*

C. ficifolium Sm. Sea Mills station, G, *I.F.G.* Also *Lathyrus sylvestris* L.

Geranium pyrenaicum Burm. f. Brislington Tip, S, *A.L.G.* Also *G. rotundifolium* L., *T.G.E.*

G. pusillum L. A small patch, Tytherington Hill, G, *R.S.C.* Also in this vicinity were *G. rotundifolium* L., *Salvia horminoides* Pourr., *Chrysanthemum parthenium* (L.) Bernh. and *Koeleria cristata* (L.) Pers.

Erodium moschatum (L.) L'Hérit. Brislington Tip, S, *A.L.G.* and *Mrs. O.M. Stewart.*

Medicago x *varia* Martyn Together with the parents, *M. falcata* L. and *M. sativa* L., Bedminster Down Tip, S, *A.L.G.*

M. lupulina L. var. *willdenowiana* Koch A densely glandular-hairy form, much smaller in all its parts than the type, in abundance, Avonmouth Docks, G, *A.L.G.* and *Lady Ricketts*, det. *E.J.C.* Also *M. polymorpha* L., *A.L.G.*

M. arabica (L.) Huds. Field gateway, Spaniorum Hill, Henbury, G, *G.W.G.* Also outside and within Bleadon Churchyard, S, *C.M.L.*

Trifolium medium L. Old tip, Lawrence Weston, G, *I.F.G.*

Lathyrus nissolia L. Abundant in long grass in roadside verges, Heron's Green, Chew Valley Lake, S, *R.M.P.*

L. sylvestris L. By path, Litton Reservoir, S, *R.S.C.*

Agrimonia odorata (Gouan) Mill. Bays Wood, near Horton, G, *Mrs. M.M.C. Reiss*, conf. *A.L.G.*

Sorbus torminalis (L.) Crantz A mature tree and two saplings, Bickley Wood, Hanham, G, *C.W.H.*

Sedum album L. Sand Point, S, *J. Warne*, per *A.L.G.* Probably introduced here.

Myriophyllum spicatum L. Barrow Gurney Reservoir, and also Litton Reservoir, S, *R.S.C.*

Hippuris vulgaris L. Kennet and Avon Canal, Bath, and Camerton, S, *D.G.*

Viscum album L. In 1978, on *Sorbus aria* (L.) Crantz, Burrington Combe, S, *C.M.L.*

Anthriscus caucalis Bieb. In quantity, Avonmouth Docks, G. *A.L.G.* Probably brought in with grain from the Mediterranean.

Crithmum maritimum L. Still persists at Battery Point, Portishead, S, *P.J.M.N.*

Oenanthe pimpinelloides L. Plentiful, Old Down, Stanton Drew, S, *R.M.P.*

Euphorbia platyphyllos L. Brislington Tip, S, *A.L.G.* and *Mrs. O.M. Stewart.*

Polygonum bistorta L. Large colony by roadside, East Harptree, S, *R.M.P.* Also by railway arch, Kilmersdon, S, *I.F.G.*

Rumex sanguineus L. var. *sanguineus* Brislington Tip, S, *A.L.G.* and *Miss M. McCallum Webster.* Regrettably the Hensman Memorial Church, Victoria Square, Clifton, site for this plant is now endangered. The church was pulled down some years ago, and a block of flats is now built on the area. However, two plants survived outside the grounds in May 1980, but the continued existence of the plant there is doubtful (*P.J.M.N.*). It must have persisted at this locality for well over half a century (see Riddelsdell *et al.*, 1948, *Flora of Gloucestershire*, p. 413, and J.E. Lousley, Notes on British Rumices: I, *B.E.C. Report for 1938*, Vol. XII, p. 129).

Primula veris L. × *vulgaris* Huds. With both parents, adjoining Blagdon Reservoir, S, *R.S.C.*

Lysimachia nummularia L. Pool by railway, Worle, S; with *Myosotis scorpioides* L., Chew Valley Lake and Blagdon Reservoir, S, *R.S.C.*

Verbascum virgatum Stokes A single plant, Brislington Tip, S, *T.G.E.*

Kickxia elatine (L.) Dumort. One plant in 1978, Black Rock Quarry, Avon Gorge, G, *C.M.L.* and *A.L.G.* Also on Portbury Tip, S, *A.L.G.*, with

Lepidium campestre (L.) R. Br., *Chenopodium polyspermum* L. (abundant) and *C. rubrum* L.

Veronica catenata Pennell River Kenn, Tickenham, S, *P.J.M.N.*

Verbena officinalis L. Clarken Combe, Long Ashton, S, *P.J.M.N.*

Prunella vulgaris L. Pale pink form, Inglestone Common, G, *Mrs. M.M.C. Reiss.*

Lamium hybridum Vill. Church Road, Stoke Bishop, G, *I.F.G.* Abundant, Market Gardens, Bromley Heath, Downend, G, *A.L.G.* and *M. Sell.*

Nepeta cataria L. Dean Hill, Lansdown, S, *D.G.*

Legousia hybrida (L.) Delarb. Freezing Hill, near Wick, G, *D.G.* This cornfield weed, like a number of others, seems much rarer than formerly.

Galium x *pomeranicum* Retz. Still on Observatory Hill, Clifton Down, G, where previously reported by N.Y. Sandwith (*Bristol Botany in 1962*), *C.M.L.* and *M.R. Lovatt.*

Valerianella carinata Lois. Persistent and now widespread in Clifton, Bristol, G, *C.M.L.*; in 1978, by railway, Cook's Folly, Avon Gorge, G, *C.M.L.* and *A.L.G.* In limestone wall, below Purn Hill, S, *C.M.L.* Abundant by railway, Keynsham; garden weed, Burnham-on-Sea; in rockery by seafront, Weston-super-Mare, S, *R.S.C.* White (*Flora of Bristol*, p. 360) reports this plant from rocks near Birnbeck, Weston-super-Mare. Also on Brislington Tip, S, *A.L.G.*

Dipsacus sativus (L.) Honckeny [*D. fullonum* L. ssp. *sativus* (L.) Thell.] Several flowering plants, Brislington Tip, S, *T.G.E.* Also many basal rosettes, *A.L.G.*

Senecio x *albescens* Burbidge and Colgan Towpath below Burwalls, Avon Gorge, S, *C.M.L.* and others, det. (*in situ*) *Dr. A.J. Silverside*, conf. *E.J.C.* *S. jacobaea* L. grows nearby and *S. cineraria* DC. is grown locally in gardens, *C.M.L.*

Filago minima (Sm.) Pers. Dismantled railway sidings, Sea Transport Stores,

Yate, G, *G.W.G.*, conf. *A.J.W.* Nearby were *Vulpia myuros* (L.) C.C. Gmel., *Potentilla intermedia* L. and *Juncus tenuis* Willd.

Cirsium eriophorum (L.) Scop. Several plants in rough grassland, Tyley Bottom, Wotton-under-Edge, G, *R.S.C.*

Centaurea cyanus L. Brislington Tip, S, *A.L.G.* Also *Ranunculus arvensis* L., *Papaver lecoqii* Lamotte, *Geranium pyrenaicum* Burm. f., *Petroselinum segetum* (L.) Koch and *Hyoscyamus niger* L.

Lactuca virosa L. With *L. serriola* L., abundant on roadside from Black Rocks to St. Vincent's Rocks, Portway, Avon Gorge, G, *A.L.G.* and *C.M.L.*

Hieracium salticola (Sudre) Sell & West Disused railway line, Pensford, S, *I.F.G.*, det. *Dr. C.E.A. Andrews.* This locality is isolated from the main area of distribution of this Hawkweed in Central England, where it is locally common. Also at or near this site were *Arenaria leptoclados* (Reichb.) Guss., *Malva moschata* L. (very fine), *Geranium columbinum* L., *Polygonum convolvulus* L., *Echium vulgare* L., *Solidago virgaurea* L. (abundant) and *Erigeron acer* L.

Alisma lanceolatum With. Still at Horton, G, *Mrs. M.M.C. Reiss.* Also at edge of pool by railway, Worle, S, and at Blagdon Reservoir, S, *R.S.C.*

Butomus umbellatus L. Blagdon Reservoir, S, *R.S.C.* Also *Juncus compressus* Jacq.

Triglochin palustris L. Between Peasedown and Radstock, S, *D.G.*

Groenlandia densa (L.) Fourr. This pondweed may be declining in England and in the Bristol area. However, quite plentiful in a small pond, Stapleton, G. Also in fair quantity in rhine, Tickenham Moor, S, *P.J.M.N.*

Paris quadrifolia L. Swainswick, S, *D.G.*

Ophrys apifera Huds. More than a hundred spikes on roadside bank, Cold Ashton, G, *C.W.H.* Increasingly rare on Clifton Downs, Bristol, G, where only a single rosette seen, *C.M.L.*

Dactylorhiza fuchsii (Druce) Soó Separated from a large colony of spotted

orchids were two plants with pure white flowers with no trace of marking, and with slightly spotted leaves, on scree slope, Goblin Combe, S, *A.F.D.*

Typha latifolia L. Tyley Bottom, Wotton-under-Edge, G. Also pool on Potter's Hill, near Lulsgate, S, *R.S.C.*

Eriophorum vaginatum L. Several tussocks, pool, Smitham Hill, East Harptree, S, *R.S.C.*

Scirpus lacustris L. Tyley Bottom, Wotton-under-Edge, G. Also, with *Bidens tripartita* L., Chew Valley Lake, S, *R.S.C.*

Carex hostiana DC. A few plants, wet meadow, Churchill, S, *R.S.C.*

C. binervis Sm. Several plants, woodland ride, East Harptree, S, *R.S.C.*

C. lepidocarpa Tausch Foxcote, S, *D.G.*

C. strigosa Huds. Tellisford, S, *D.G.*

× *Festulolium holmbergii* (Dörfl.) P. Fourn. This hybrid between *Festuca arundinacea* Schreb. and *Lolium perenne* L. was present at the approach to Portbury Dock, S, *T.G.E.* and *A.L.G.*, det. *C.E.H.*

Puccinellia distans (L.) Parl. With *P. rupestris* on towpath below Old Sneed Park, G, *A.L.G.*, *C.M.L.* and others. Brislington Tip, S; also site of the old Glastonbury Tip, now pasture, S, *A.L.G.*

P. rupestris (With.) Fernald & Weatherby Demolition site, Avonmouth Docks, G, *A.L.G.* Probably carried by birds from native populations in the vicinity. Abundant at side of road and adjoining waste ground near Pill, S, *C.M.L.*

Poa subcaerulea Sm. Wall, Bridge Valley Road, Bristol, G, *A.L.G.* and *C.M.L.* Also at two sites in Fishponds, Bristol, G, and on Strontia waste, Wickwar, G, *A.L.G.* Abundant in Sand Bay, S, *A.L.G.*

Catabrosa aquatica (L.) Beauv. Swampy field below Cleeve Wood, near Willsbridge, G, *C.W.H.*

Bromus madritensis L. Abundant near Horseshoe Bend, Shirehampton, G,

C.M.L., who reports that the plant was collected from this locality in 1932 by A.J. Wilmott (Herb. BM).

B. lepidus Holmberg Many plants on roadside leading to Brislington Tip, S, *T.G.E.*

Calamagrostis epigejos (L.) Roth Small patch, Goblin Combe, S, *R.S.C.* Also Kewstoke Woods, S, *A.L.G.*

× *Agropogon littoralis* (Sm.) C.E. Hubbard (*Agrostis stolonifera* L. × *Polypogon monspeliensis* (L.) Desf.) Old Glastonbury Tip, S, *A.L.G.*

Polypogon monspeliensis (L.) Desf. In quantity, Avonmouth Docks, G, *A.L.G.* Brislington Tip, S, *T.G.E.* and *A.L.G.* Also old Glastonbury Tip, S, *A.L.G.*

Alopecurus bulbosus Gouan Persistent and locally plentiful in grazed salt marsh, Pill, S, *C.M.L.*, where first recorded by the Misses Cundall (see White, *Flora of Bristol*, p. 644). Also at this site were *Trifolium fragiferum* L., *Bupleurum tenuissimum* L. and *Parapholis strigosa* (Dumort.) C.E. Hubbard.

Parapholis strigosa (Dumort.) C.E. Hubbard Brislington Tip, S, *A.L.G.* and *R.M.P.*

ALIENS. Pteris cretica L. Gough's Cave, Cheddar, S, *R.M.P.*

Consolida ambigua (L.) P.W. Ball & Heywood [*Delphinium ajacis* auct.] Brislington Tip, S, *T.G.E.* and *A.L.G.*

Arabis caucasica Willd. Long known to be well established on St. Vincent's Rocks, Avon Gorge, G. Also beside the Bridge below Burwalls, S, *C.M.L.* Other garden plants in the vicinity of the Gorge include *Iberis sempervirens* L. (Clifton Down, G), *Silene armeria* L. (near the Gully, Clifton Down, G), *Anemone apennina* L. (in 1978 in quarry below Burwalls, S, but not persisting), and *Solidago canadensis* L. (Observatory Hill and Cook's Folly, G, and also below Burwalls, S), *C.M.L.*

Erysimum cheiranthoides L. On tipped material, Combe Hay, S, *D.G.*

Malcolmia maritima (L.) R. Br. Avonmouth Docks, G, *A.L.G.* Also *Vicia tenuifolia* Roth.

Silene pendula L. Claverton, S, *D.G.*, det. *E.J.C.*

Lychnis coronaria (L.) Desr. A small, well-established patch on dunes, Sand Bay, S. Also Bedminster Down Tip, S, and Brislington Tip, S, *A.L.G.*

Cucubalus baccifer L. In 1978, at side of approach road to Portbury Dock, S, *Dr. M.C. Smith*, per *A.L.G.* Not seen in 1979.

Montia perfoliata (Willd.) Howell A large clump, Canford Park, Westbury-on-Trym, G, *Mrs. W.M. Cummins.*

Amaranthus blitoides S. Watson Brislington Tip, S, *A.L.G.*, det. *E.J.C.* Also *A. hybridus* L.

A. spinosus L. Two plants, demolition site, Avonmouth Docks, G, *A.L.G.*, det. *E.J.C.* This Pigweed from India is rarely seen in Britain. Also *A. albus* L.

Chenopodium glaucum L. A single plant, Avonmouth Docks, G, *A.L.G.*

C. ambrosioides L. A single plant, Brislington Tip, S, *T.G.E.*, conf. *E.J.C.* There are very few British records of this highly aromatic, polymorphic weed species of tropical America. An illustration of the plant by *T.G.E.* is given under *Aliens and Adventives*, compiled by *E.J.C.*, in *B.S.B.I. News*, April 1980, No. 24, pp. 14-18.

Salsola kali L. ssp. *ruthenica* (Iljin) Soó (*S. pestifer* A. Nelson) Avonmouth Docks, G, *A.L.G.*, conf. *E.J.C.* Also in quantity, probably from the Mediterranean, were *Cicer arietinum* L., *Trigonella foenum-graecum* L., *Phalaris minor* Retz. and *Triticum durum* Desf.

Kochia scoparia (L.) Schrader *sensu lato* Avonmouth Docks, G, *A.L.G.*

Malva nicaeensis All. Demolition site, Avonmouth Docks, G, *A.L.G.*, conf. *E.J.C.* Also *M. pusilla* Sm., *A.L.G.*, conf. *E.J.C.* and *M. parviflora* L., *A.L.G.*

Abutilon theophrasti Medic. Two flowering plants in potato crop, Market Gardens, Bromley Heath, Downend, G, *A.L.G.* Also abundant at Avonmouth Docks, G.

Modiola caroliniana (L.) G. Don fil. A single plant of this North American member of the Malvaceae, new to the list of adventives of the Bristol area, demolition site, Avonmouth Docks, G, *A.L.G.*, det. *E.J.C.* (in the absence of flowers and fruit).

Sidalcea oregana (Nutt.) Gray Bedminster Down Tip, S, *A.L.G.*, det. *E.J.C.* Also *Linum usitatissimum* L., *Vicia villosa* Roth ssp. *villosa* and *Coriandrum sativum* L.

Trifolium resupinatum L. A single plant, Avonmouth Docks, G, *A.L.G.*

Coronilla varia L. Garden weed, Timsbury, S, *D.G.*

Lathyrus latifolius L. Roadside, Stanton Wick, S, *R.M.P.*

L. grandiflorus Sibth. and Sm. Near Christ Church, Clifton Down, G, *C.M.L.*, det. *A.L.G.*

Rubus laciniatus Willd. In 1977, the Gully, Clifton Down, G, *C.M.L.*, *Dr. L.C. Frost* and *Dr. M.H. Martin*, conf. *A. Newton*.

Cotoneaster simonsii Bak. Rubbish tip, Kingsweston, G, *I.F.G.*

C. franchetii Boiss. Bird-sown on bank of the New Cut, Bristol, S, *A.L.G.* Also towpath, Leigh Woods, S, *C.M.L.*, det. *E.J.C.*

Sedum reflexum L. Locally abundant in dense patches, flowering well, below St. Vincent's Rocks, G, *C.M.L.* In contrast, the native *S. forsteranum* Sm. is scattered across the whole of the rock, in small patches, flowering rather sparsely.

Peltiphyllum peltatum (Torrey) Engler Marshy depression in woodland, Charterhouse, S, *J.A.* and *R.M.P.*

Lythrum junceum Banks & Solander Brislington Tip, S, *A.L.G.* Also *Hirschfeldia incana* (L.) Lagr.-Foss., *Dianthus barbatus* L., and *Centaurea montana* L.

Ammi majus L. A single plant, Brislington Tip, S, *T.G.E.*

Heracleum mantegazzianum Somm. & Levier Roadside, Dyrham, G, *I.F.G.*

Polygonum baldschuanicum Regel (*P. aubertii* Louis Henry) Redcliff Bay, S, *P.J.M.N.*

Cannabis sativa L. Two plants in the Gully, Durdham Down, G, *A. Byfield*, per *C.M.L.*

Ceratostigma plumbaginoides Bunge A very large plant, possibly bird-sown, in churchyard wall, St. Cuthbert's Church, Wells, S, *K.E. Bull*, per *R.M.P.*

Buddleja alternifolia Maxim. Bedminster Down Tip, S, *A.L.G.*, conf. *E.J.C.* New to the Bristol area, and possibly to Britain. Also *B. davidii* Franch., including the white form.

Solanum nitidibaccatum Bitter Several plants, with *S. nigrum* L., in marrow crop, Market Gardens, Bromley Heath, Downend, G, *A.L.G.*, conf. *Dr. Jennifer M. Edmonds.* Bristol gatherings of *S. sarrachoides* Sendtn. may be referable to this taxon.

Datura stramonium L. var. *tatula* (L.) Torrey Avonmouth Docks, G. *A.L.G.*

Salvia viridis L. (*S. horminum* L.) Portbury Tip, S, *A.L.G.* Also *Borago officinalis* L. and *Datura stramonium* L.

Phupsis stylosa (Trin.) B.D. Jackson Railway track, Midsomer Norton, S, *L.G.*, det. *E.J.C.*

Galinsoga ciliata (Raf.) Blake Adjoining Colston Hall, Bristol, G, *I.F.G.* Single plant, riverside, Willsbridge, G, *C.W.H.* Also, despite thorough weeding in 1978, reappeared in Keynsham Park, S, *C.W.H.* Brislington Tip, S, *A.L.G.*

Ambrosia artemisiifolia L. Demolition site, Avonmouth Docks, G, *A.L.G.* Also *Artemisia biennis* Willd. in abundance.

Solidago gigantea Ait. Below Cook's Folly, Avon Gorge, G, *C.M.L.*, det. *E.J.C.*, and Avonmouth Docks, G, *A.L.G.* Also below Burwalls, Avon Gorge, S, *C.M.L.*

Centaurea diluta Aiton Marshfield, G, *D.G.*

Tragopogon porrifolius L. A number of plants, probably a fairly new arrival, near Severn House Farm, near Berkeley, G, *P.J.M.N.* Also two plants, Southfield Road, Westbury-on-Trym, G, *C.S. Carlile.*

Lactuca tatarica (L.) C.A. Mey. Old tip, Lawrence Weston, G, *I.F.G.* and *Mrs. A. Royle,* det. *E.J.C.* Previously known from Avonmouth Docks. Also atypical form of *Erigeron philadelphicus* L., *I.F.G.*, det. *E.J.C.*

Iva xanthifolia Nutt. A single plant, demolition site of the BOCM and Silcocks Mills, Avonmouth Docks, G, *A.L.G.* This annual wind-pollinated North American Composite, the Prairie Ragweed, related to *Ambrosia,* is a great rarity in Britain.

Hemerocallis fulva (L.) L. Beside Portway below Bridge Valley Road, Avon Gorge, G, *C.M.L.* Also a well established group on roadside, Brislington Tip, S, *T.G.E.*

H. lilioasphodelus L. A few plants, well naturalized, Charterhouse, S, *R.M.P.*

Allium roseum L. ssp. *bulbiferum* (DC.) E.F. Warb. Two plants by the Avon, Ashton Fields, Bristol, S; also naturalized in Bleadon Churchyard, S, *C.M.L.*

Sisyrinchium striatum Smith Bedminster Down Tip, S, *A.L.G.* Also *Gladiolus byzantinus* Mill.

Lolium temulentum L. var. *arvense* Liljebl. One plant, with *Phalaris canariensis* L., by Portway under Clifton Suspension Bridge, G, *C.M.L.* These plants may have been introduced with straw bales used to protect machinery during the removal of dangerous rocks.

Bromus willdenowii Kunth (*B. unioloides* Kunth) Brislington Tip, S, *A.L.G.* Also *Lagurus ovatus* L.

Hordeum distichon L. Steep Holm, S, *R.S.C.* No doubt a bird-sown casual.

Eragrostis cilianensis (All.) Lutati Spikelet length, known to be very

variable in this tropical and warm temperate weed species, was 0.4 - 0.5 mm in 1979, compared with 0.9 mm in 1978, Brislington Tip, S, *T.G.E.*

Panicum miliaceum L. var. *compactum* Koern. Three plants, Brislington Tip, S, *A.L.G.* and *T.G.E.* This variety also on the Portbury Tip, S, *A.L.G.*

P. dichotomiflorum Michx. Brislington Tip, S, *T.G.E.* and *A.L.G.*, det. *C.E.H.* A first record of this annual North American grass, a colonist of disturbed ground, in the Bristol area.

Echinochloa crus-galli (L.) Beauv. var. *breviseta* (Doell.) Niels. Brislington Tip, S, *A.L.G.*, det. *C.E.H.* Numerous on the tip was a form with long awns; also present were two plants of var. *mutica* Hack., *T.G.E.*, conf. *C.E.H.*

Digitaria sanguinalis (L.) Scop. Numerous in 1978 and 1979, Brislington Tip, S, *A.L.G.* and *T.G.E.*, det. *C.E.H.*

Setaria viridis (L.) Beauv. A long-bristled variant with purple awns, abundant and widespread, Brislington Tip, S, *T.G.E.*

Sorghum halepense (L.) Pers. forma *muticum* Many plants, Brislington Tip, S, *A.L.G.* and *T.G.E.*, det. *C.E.H.* Also a few plants with long awns, *T.G.E.*

BRYOPHYTE: Funaria pulchella Philib. Black Rock Gully, Avon Gorge, G, *J.A.* This taxon, closely related to *F. muhlenbergii* Turn., was recorded from Clevedon last year.

I thank everyone who has supplied records and helped with these, especially Mr. A.L. Grenfell and Mr. P.J.M. Nethercott. I am indebted to Long Ashton Research Station for the supply of meteorological records.

AVON MAMMAL REPORT 1979

by

A. F. JAYNE

A modest number of 27 mammal species was recorded in Avon during 1979. This does not include the wallaby, reported in the local press as being killed in a country lane near Englishcombe, Bath. The unfortunate animal had previously been reported missing from a private collection. Species not accounted for this year include the yellow-necked mouse which is locally confined to mature deciduous woodland and is normally only seen when caught during live-trapping operations. Only one deer species, the roe, was reported in the wild.

The highest number of records, 977, received for any one year include a few from just outside the County boundaries. From a mammal distribution point of view the habitat is more important than a mere man-made line on a map. The highest ever figure is explained by the substantial increase in the numbers of hedgehog and mole observations. Indeed reports of small mammals show a considerable decrease.

Many thanks are due to the support of the 80 observers listed below:-

Mrs. J. Andrews, A. J. Aston, Mrs. M. H. Badger, Miss Banton, K. Batty, Mr. Boakes, N. Boosey, N. Bridges, Mrs. M. Browne, *R. A. Burberry, R. J. Burberry, Mrs. R. Burberry, Mrs. V. M. Burberry, J. F. Burton, *Mrs. D. Catley, *P. J. Chadwick, G. E. Clothier, J. Coffin, M. Coffin, Miss D. Davey, A. Dowdall, S. B. Edwards, Mrs. S. J. Evans, P. G. Farmer, A. Fisk, Mrs. P. R. Foster, Miss D. Fowler, R. A. J. Giles, Mrs. D. Grant, J. Grant, Miss I. F. Gravestock, A. L. Grenfell, Mrs. D. Grenfell, D. A. Griffiths, *H. R. Hammacott, *Dr. S. S. Harris, Miss C. J. Haskins, Miss S. Haseldine, B. Hillyer, L. Horton, Miss M. Hosie, Miss E. Humphris,

A. F. JAYNE

*Mrs. J. Humphris, Mrs. Kendall, Miss L. Keitch, Mrs. C. Kitchen, *M. A. Kitchen, P. James, *A. F. Jayne, *Mrs. P. Jayne, *Miss H. Jayne, Miss R. C. Lee, *Miss E. J. Lenton, J. S. Lewton, S. Lonsdale, N. McKenna, Miss A. Mahood, T. Male, *H. C. Morris, Mrs. K. Morris, G. Nicholson, Mrs. L. Parkinson, *J. C. Phillips, Mrs. S. Pike, R. H. Poulding, *Dr. H.E. Rose, I. Scapens, P. Sherlock, Mr. & Mrs. Smeed, D. V. Smith, E. S. Smith, G. Smith, A. Stanton, B. Stanton, Mrs. M. Stanton. D. Troake, F. White, Mrs. M. G. Wildgoose, *R. Wildgoose, Mrs. B. Williams.

Those whose names are prefixed with an * contributed 10 or more records.

I. HEDGEHOG. The 258 records submitted were by far the highest number in any one year, being almost double that of the previous highest (132 in 1978). The number of observers was only marginally higher at 30 against 26. I have meticulously noted each road casualty seen by myself over the past two years and saw 130 throughout this year against 78 in 1978. Even allowing for the vagaries of the recording system it would appear that 1979 was an abundant year for this species. Over 90% of the records were of dead animals on the roadways with a peak occurring in August and early September. Records were received for all months of the year.

An unusual account was received of a "young hedgehog, about four inches overall length," being found in a Clevedon garden on January 9th (K.B.). This youngster had survived through a spell of bitter weather, with frost and snow. It was taken into a greenhouse and was thriving on a diet of bread and milk and minced raw meat. A female with four small young was seen in long grass between a hedge and a garden shed in Thornbury (D.F.) whilst in another Thornbury garden an adult was rescued from a "bean net" in which it had become enmeshed (M.H.B.). A nest was found underneath a water tank in the next garden. Several live ones were seen in the streets of Chipping Sodbury (R.W.), one of which held up the main road traffic near the war memorial at 8.30 p.m. on 31st July. Another was seen to suddenly run from the pavement, along which it had been ambling, into the road and underneath the wheels of an approaching car. The driver did not appear to see it or realize he had squashed it. Two children were seen escorting one from a busy road through Winterbourne Down into a nearby garden at 9.00 a.m. one morning (A.F.J.). An adult with young was seen several times in a Westbury-on-Trym garden where a large nest was found in a strawberry bed. An emaciated corpse was found in the open ground in Eastville Park, (C.J.H.) following a long dry spell in mid July. There were no visible signs of injury. Two were found hibernating in garden sheds, one near the Downs in March (L.P.) the other at Lawrence Weston in early October (I.F.G.).

AVON MAMMAL REPORT

2. MOLE. Molehills were sighted over a widespread area covering 19 ten-kilometre squares.

3. COMMON SHREW. Of the fifteen records received, seven were of remains found in bottles (A.F.J.). A body seen in the garden of the Lodge at Whitcliff Park, near Berkeley had been caught and left uneaten by the cat. This is commonly the case with insectivores which are caught by carnivorous animals. The same applies to insectivorous birds such as robins and starlings. Two common shrews were caught in a single "Flap" trap during a survey in Littleton Nature Reserve (R.A.B./A.F.J.). One had survived by canibalism of the other, which was half eaten - the skin being partly turned neatly inside out. This unfortunate animal may well have been dead before the other entered. Another was caught in a break-back trap in a Nailsea garage (H.R.H.). The others were dead animals seen, one on the pavement in Lower Almondsbury (P.J.), two in the middle of droves on Nailsea Moor (H.R.H.) and one at Shiplate (P.J.C.).

4. PYGMY SHREW. Only four reports during the year. One skull was found in a bottle at Rudgeway (A.F.J.), one was trapped at Nailsea (H.R.H.) and two bodies were seen, the first at Winterbourne Down (H.J.), the second at Black Rock Nature Reserve (A.F.J.).

5. WATER SHREW. A skull was identified from a bottle in an Alveston layby (A.F.J.). A small animal was seen swimming in the River Frome at Winterbourne Down which subsequently was seen to be a water-shrew (A.F.J.). Attention was first drawn to it as it was noticed making steady headway against the considerable current at this point of the river. It swam out into mid-stream several times, sometimes on the surface and sometimes under-water. The water was clear and shallow, bubbling over the stony river bed. The shrew was clearly visible under the surface and at times could be seen foraging among the stones on the bottom. It made better progress against the current whilst under the surface. On a number of occasions it swam several yards up-stream in the centre of the river, then allowed the current to take it back down and into the bank, whence it landed and spent some time hunting through the crevices of a dry stone wall which is at the waters edge at this point. As it worked along this wall the demarcation line of its black upper surface fur and its silvery-grey under fur was clearly visible. It was watched for about ten minutes from a distance of a few yards.

BATS. Records were received of unidentified bats in flight from several locations; the latest being a single small one flying around a house at Cromhall on November 3rd.

8. GREATER HORSESHOE BAT. Two roosting locations of small numbers were investigated, in a cave at Upton Cheyney and in a cellar at

Lansdown (M.B.).

19. PIPISTRELLE. Caught whilst flying around a bathroom in a house at Fiddlers Bottom, Nr. Cromhall. It was identified and released outside, unharmed, (E.H./J.H.).

21. LONG-EARED BAT. Several were seen roosting in the same cellar on Lansdown as greater horseshoes, (M.B.).

24. FOX. Fifty-three observers submitted reports, the majority of which were urban/suburban sightings. The urban fox is no longer a phenomenon and the high number of day time sightings indicate its increasing numbers and adaptation to its new mode of life. It is, nowadays, much easier to see foxes within the city than in the surrounding countryside and it is becoming increasingly obvious that their density is much greater in the built-up environment.

We are fortunate in having Dr. Stephen Harris working on a detailed study of our Bristol foxes. Much of the hitherto little know ecology and way of life of these recent town dwellers is being unearthed.

A large number of cubs were caught and ear-tagged in the early summer months. It is hoped to recover as many as possible to add considerably to the existing information of the dispersal of cubs on the break-up of family units and of the mortality rate and life expectancy of these cubs. As most recoveries are of dead animals, usually road casualties, it is important that any sightings of such, either in or adjacent to the city, should be reported to Dr Harris at the University (PHONE 24161 Ex 802). It is also important to report any known litters of cubs, or suspected breeding places, as early as possible to enhance a successful capture. The study work is scheduled to continue over several more years. I am indebted to Dr Harris for much information he has given to me and for the opportunity to accompany him on a number of his enterprises.

The density of foxes within the sub-urban boundaries is indeed staggering as may be illustrated by the following. In a triangular area between Filton and Horfield bounded by the A38 (Filton Road/Gloucester Road North), Southmead Road and Monks Park Avenue at least five different litters of cubs were known to exist. The area is considerably less than one square kilometre which compares with an approximation of a truly rural density of about one breeding earth per one square kilometre. Three of these litters were caught and ear-tagged at about eight weeks old in early May. Two of these, from different litters, were subsequently recovered, within 100 metres of each other, as road casualties on the A38, on succeeding days, July 2nd and 3rd. This is not selected as the highest density area but rather as a typical housing-estate style development area. The numbers are almost certainly higher in the North-Western sector of Bristol which encompasses the districts of Westbury-on-Trym, Stoke Bishop and Coombe Dingle, an area with many large gardens and grounds and with semi-natural

areas not readily accessible to the public.

The location of breeding dens varies considerably and reflects the initiative and adaptability of this creature. The most commonplace site is underneath garden sheds, both in large and small gardens. Other popular sites include piles of junk and holes dug in derelict or overgrown gardens. In the urban centres a fox will readily gain access to buildings through broken ventilation bricks or grilles which afford it a warm, dry shelter under the floorboards.

Of the 187 records submitted 41 were of road casualties, 14 of these being on the M32 between Hambrook and Eastville. Nine others occurred on motorways. More than half these casualties occurred during June to August, the months when fully weaned cubs would be moving on their own.

The overall records were from 121 one-kilometre squares which were spread over 14 ten-kilometre squares.

27. STOAT. Two road casualties were seen just outside the Avon County boundary, one near Gurney Slade, the other at Berkeley Road (A.F.J.). An adult and juvenile were seen together on Brean Down (C.J.H.). A "great commotion" amongst a group of free-ranging poultry at the edge of woodland at Cromhill alerted the owner who found one of the hens with a stoat attached to its neck. As it let go a second stoat appeared and together they attacked a cockerel. They were eventually driven off leaving the poultry in a terrified state (J.H.).

28. WEASEL. Nine of the 16 reported sightings were of animals running across roads. One of them was noticed carrying a small mammal at Kenn Moor (J.C.P.). Two were seen in gardens in the Thornbury area (M.H.B., V.M.B.) and one at Itchington was caught and killed by a cat (N.B.). During a bird-ringing session at Littleton-on-Severn a weasel was found endeavouring to remove a blue-tit from the bottom shelf of a mist net. The blue-tit was found to be dead so it was left on the ground under the net. At the next net inspection, half an hour later, it was gone. One was noticed dead on the road at Wraxall (P.J.C.).

30. MINK. Two sightings of tracks were reported from near Chew Magna (E.J.L.). One adult was seen to climb from the River Avon at Grosvenor Bridge, Bath (2 kilometres from the City centre) onto a partly submerged willow branch. After five minutes it went onto the bank where it picked up a large eel, returned to the river, and swam off with it downstream (P.J.). Another mink was noticed swimming in the River Kenn carrying an eel in its mouth before disappearing under willow roots (H.R.H.).

31. BADGER. Many fewer reported than in previous years, with only one reference to cubs (C.J.H.). The Section did not hold any of the customary evening badger watches this year.

An unusual occurrence of badger behaviour was noted by Mr. Martin Jones of Backwell. He was walking on the snow covered ground above the village

at about 8.45 a.m. on February 11th, when he noticed the body of a badger about fifteen yards away from entrances to a large sett. It had been severely bitten around the neck. Imprints in the snow showed that it had been dragged from the sett by other badgers. Passing by about six hours later Mr Jones was amazed to find that it had been dragged a short distance into the wood and completely covered with snow, pine needles and leaves. All the surrounding prints were clearly of badger (G.E.C.).

Dr Harris is also conducting a comprehensive study of surburban badgers and has discovered many setts within the City boundaries, particularly in the North-West sector. An interesting animal caught by Dr Harris in a Stoke Bishop garden had reddish fur over its back from behind the shoulders and down over its rump. Several badgers have been caught and fitted with small radio transmitters, the signals from which can be picked up on receivers thus enabling the movement of the animals at night to be monitored. Much interesting data is being compiled regarding movements and ranges.

32. OTTER. A field meeting of the Mammal Section in November, led by Miss Elizabeth Lenton produced very good evidence of otters in several sites visited in North Somerset. In one particular area, very fresh spraints and clearly defined footprints, probably no more than a few hours old were seen, together with fresh mink scats and footprints. This provided an excellent opportunity for members present to compare the two. A portion of eel, about one inch in diameter by about six inches long was found nearby. It had been eaten from both ends, though by which of the two animals it was uncertain.

34. GREY SEAL. Seen by a yachtsman in the Severn Estuary near Counts Buoy off Oldbury Power Station on July 1st (L.P.).

45. ROE DEER. The only deer species reported in 1979 was Roe. Two does were seen grazing on stubble on Lansdown (E.J.L.). They ran off into nearby woodland when disturbed (E.J.L.). The other records were of slots, some at Dolebury Warren (M.A.K.) and others at Silkwood (A.F.J.). The latter were subsequently confirmed by a local Forestry Commission officer who knew of three roe in the vicinity.

53. BROWN HARE. Nowhere reported as common but fairly well spread with reports from twelve ten-kilometre squares. Sighted reguarly at West End, Nailsea (H.R.H.) where the observer reports "appreciably more sightings than usual, but uncertain whether this means more hares or the same few seen more frequently". A farm worker found two very small leverets in the same farm near Nailsea Court. Regular sightings were made in the Yeo Estuary area (H.E.R.). A car driver stopped in Lower Almondsbury to allow a hare, apparently bemused by the headlights, to gain the roadside (D.V.S.). The

two road casualties happened within a kilometre of each other, near Winterbourne, one in April, the other in December (A.F.J.). Although walking the surrounding fields regularly for the last twenty years, I have yet to see a hare in them.

55. RABBIT. Widely seen throughout the area, reports covering 23 ten-kilometre squares. The recordings were of both obvious field signs and of live animals. An instance of myxomatosis was noted near Thornbury (L.K.). A police motor patrol driver several times saw a large number on the grassy roundabout on the A46 road at the M4 intersection at Tormarton (D.T.). He believed them to stay there all night. A pure black rabbit was seen at Pipley Bottom (E.J.L.). Several were seen feeding in a cemetery at Coldharbour Lane, Filton (A.F.J.).

57. GREY SQUIRREL. Generally seen over a wide range with peak observations from August to October. Almost half the sightings were from suburban settings, particularly in the Clifton district where it is not uncommon to see them raiding waste bins around the Downs (P.J.C., A.F.J.). One was seen at Henbury being hotly pursued by a cat (D. & J.G.). Another was watched stripping hazelnuts from the upper branches of a tall tree and dropping the broken shells down onto the ground.

59. DORMOUSE. A visit on August 4th to examine the dormouse nest boxes situated in a Somerset Nature Reserve revealed several with nests in them. An adult ran from one box up into the tree canopy. The nest was gently investigated and young could be felt inside (A.F.J.). Distinctively chewed nuts were found in two other locations, both of which were previously known sites (E.J.L.).

61. HARVEST MOUSE. Poorly recorded - the signs being that 1979 was not a good year for this species. Only three occurrences were noted (A.F.J., E.J.L.) two of them being but single nests. The grass verge site on the A46 road, which has been monitored for several years, showed a welcome increase in numbers of nests. Thirty-five, mostly breeding nests, were discovered on October 21st. A dead adult harvest mouse was found in one nest. This site contained well over one hundred nests when first discovered but has dramatically declined until only two were found last year (A.F.J.).

62. WOOD MOUSE. Remains in bottles were identified from seven locations (A.F.J.). Several were caught in Flap traps at Winterbourne Down and in Flap and Longworth traps at Littleton Nature Reserve in reed beds (R.A.B./A.F.J.). A body was recovered from an urban garden pond (R.J.P.). One was seen scampering through fallen branches during a Sectional Field meeting in Silkwood.

64. HOUSE MOUSE. An adult was found frozen into the surface ice on a garden pond in Henleaze (R.J.P.). Two skeletons were found in a deep tin in a garden shed at Winterbourne Down. They were identified by the tooth root cavities in the skulls. A house mouse was caught by a Henbury cat (D.G.).

A. F. JAYNE

66. COMMON RAT. During the Sectional bottle survey meeting in February, a layby on the A38 at Rudgeway was searched for bottles. There was much refuse dumped at this site as there was a prolonged dustman's strike in Bristol at the time. One of the members spotted movement in a large black polythene bag. After a few minutes three young rats, less than half grown, emerged from a hole in the bag and disappeared down over the bank. There was a distinct run from the bag to a hole some way down the bank. Several of those present had previously seen an adult rat emerge from this hole. The next layby, at Alveston, also contained much refuse and here there were numerous rat droppings and runways through the rubbish. The majority of the other records received were of road casualties.

67. BANK VOLE. Ten recordings were made from seven different 10 kilometre squares, including bottle remains, gnawed hazel nut shells and two lots of live-trapping.

68. WATER VOLE. Recorded at Chew Valley Lake and Tortworth Lake (H.E.R.) and from the River Boyd at Wick, the River Frome at Winterbourne Down and Bradley Brook at Winterbourne (A.F.J.).

69. FIELD VOLE. A total of fourteen records from eight different 10-kilometre squares is grossly under-recorded fro this very common small rodent. Seven instances of remains in discarded bottles were noted as were four instances of nests, and runs under pieces of flat sheet of various materials.

Compiled by the recorders of the Entomological Section

G.R. Best
R.S. Cropper
B.S. Harper
K.W. Miller
A.R. Nichols
K.H. Poole
R.H. Poulding
R.W. Rowe

n 1977 the title of these entomological notes was changed from Lepidoptera Notes
o Entomological Notes, Bristol District to accommodate records from other orders
n addition to the moths and butterflies. A further change of name after only two
ears to Avon & District Entomological Report may seem superfluous and requiring
n explanation of why this was necessary after so short an interval. The increase
n records from a wide range of insect groups was due in part to the Avon
ntomological Survey - a project initiated by the Section to collect data for the
ological Records Centre and for the Section's local mapping schemes. It was
ncertain at the time whether this volume of records could be maintained to justify
n annual report based on Avon and therefore only a minor change in title was made
o enable other orders to be included. Fortunately, the volume of records from
mbers has been maintained to enable an annual report to be produced for Avon, and
o include records from adjacent localities in Somerset and Gloucestershire which
e not adequately covered by a local or county publication. The inclusion of Avon
n the title of this report is also in keeping with the bird and mammal reports in
e Proceedings, and reflects the change by the Entomological Section to a similar
re defined recording area which will be of value in detecting changes in insect
mbers and distribution from year to year.

An exceptionally cold spring, following a severe winter, will long be remembered
entomologists for the scarcity and late emergence of many species in 1979. January
nd February were the coldest since the winter of 1963, and the severe frosts combined
th persistent high winds destroyed or damaged many of the less hardy shrubs.
uddleia and Hebes sp. often grown in gardens to attract insects were severely
ffected but fortunately the naturalised Buddleia davidii so prolific in the Avon
orge and banks of the R. Avon in Bristol escaped with little damage. Abundant blooms
n summer on these shrubs were a marked contrast to many decimated Buddleia sp. in

gardens. Below average temperatures were recorded for each month from January to June with only an occasional mild spell. The first of May was one of the coldest May Days in many parts of the country since records were first kept and the below average temperatures persisted until late June. Light south-westerlies in July brought a change to mainly warm and sunny weather but August was generally unsettled with severe gales in mid-month. From September until early December the autumn was exceptionally mild with long sunny spells and few night frosts.

Records refer to Avon unless S. or G. appears after the locality denoting Somerset and Gloucestershire respectively, and are of single specimens unless noted otherwise. The following sent in records from which this report has been compiled:-

R.A. Angles, H.K. Barton, K.T. Batty, G.R. Best, C.S.H. Blathwayt, I. Burston, J.F. Burton, P.J. Chadwick, R.S. Cropper, E.W. Gane, Mrs N.J. Gibbs, B.J. Gregory, Miss I.F. Gravestock, J. Hadley, B.S. Harper, Miss M. Harris, G.G. Hartnell, Mrs M. Knight, K.W. Miller, B. Moore, A.R. Nichols, R.M. Payne, K.H. Poole, R.H. Poulding, R.W. Rowe, G.W. Sorrell, A.H. Weeks.

BUTTERFLIES (Lepidoptera) by B.S. Harper.

1979 was a better year for butterflies than the two preceding ones although the cold, late spring resulted in the flight period of many species being much later than average. Recently emerged Small Blues were seen on the wing in the last week of June about a month later than usual. However, Small Tortoishells were seen flying over snow-covered ground in late February. Two separate sightings of the Clouded Yellow were made in North Avon during August and September whilst a new locality for the Brown Hairstreak was discovered in the same district. A total of 19 observers sent in records of butterflies in 1979 but information on all species from more members would enable a more precise picture of the distribution and flight periods to be made especially of the commoner ones. The scientific names and orders of species follow those given in the checklist of species in 'A Field Guide to the Butterflies of Britain and Europe' by L.G. Higgins and N.D. Riley, 3rd ed. (1975), and published by Collins.

Colias crocea Geoffroy (Clouded Yellow). Singles at Marshfield, August 12 and Filton, September 13.

Inenitis camilla L. (White Admiral). Three, Michael Wood, Nr. Stone, July 12 and 1 on 17th; 15, Wetmoor Reserve, Nr. Wickwar, July 26 and one, Blagdon, August 5.

Vanessa atlanta L. (Red Admiral). Recorded from many localities in the county and numbers reported indicate a successful season for this species.

Vanessa cardui L. (Painted Lady). This immigrant first reported at Uphill, June 28; Street Heath, Nr. Street, S., July 21; Bannerdown, Nr. Bath, August 27; Burnham-on-Sea, S., August 28; three, Avon Gorge, Bristol, August 29; Weston-super-Mare, August 30; Bleadon Hill, Nr. Bleadon, S., September 15 and two larvae found on nettle, Sand Point, S., September 24.

Polygonia c-album L. (Comma). Reported in small numbers throughout the county.

Argynnis paphia L. (Silver-Washed Fritillary). Brockley Combe, Nr. Brockley, July 14; one, Michael Wood, Nr. Stone, G., July 17; six, Wetmoor Reserve, Nr. Wickwar, July 17 and 16 on 25th; three, Congresbury, July 21 and two, Goblin Combe, Nr. Cleeve, July 29.

Boloacidalia aglaja L. (Dark-green Fritillary). Two, Compton Bishop, S., July 7 and three, same place, August 12; two, Brockley, July 14; three, Burrington Combe, Nr Burrington, August 5 and three, Charterhouse, Mendip, S., August 11.

Issiana selene Schiff. (Small Pearl-bordered Fritillary). Three, Dolebury Warren, Churchill, June 24; seven, Compton Bishop, S., July 1; six, Brockley, July 14, 15.

Issiana euphrosyne L. (Pearl-bordered Fritillary). Three, Brockley, June 1 and two same place on 17th.

Hydryas aurinia L. (Marsh Fritillary). The only record is of two at Charterhouse Uphill, S., on June 2.

Pararge galathea L. (Marbled White). Generally another poor season for this species but several new localities reported - Mangotsfield; river bank at Sea Mills, Bristol; Charmy Down, Nr. Bath; Frost Hill, Congresbury; also at Pensford and Nr. Stoke.

Erebia archia semele L. (Grayling). Goblin Combe, Nr. Cleeve, July 15; five Sand Point, July 22 (first report since colonies destroyed by fire in 1976); 12,Compton Bishop, S., August 12 and one, Uphill, same date; Cheddar Gorge, August 29.

Aphantopus hyperantus L. (Ringlet). Generally reported but only noted as common at Wetmoor Reserve, Nr. Wickwar and Brockley.

Lasiomata megera L. (Wall Brown). Sand Point, May 20 and nine, same place, June 17 with ten, August 11; ten, Uphill, June 9 and one, September 29; Frost Hill, Congresbury, June 17; three, Dyrham, August 26 and one, Tog Hill, Nr. Cold Ashton, same date; two, Tyntesfield, Nr. Wraxall, August 27; 12, coast, Woodspring Bay, August 27 and three, Bannerdown, Nr. Bath, same date; two, Chittening Warth, Nr. Avonmouth, August 28 and one, Weston-super-Mare, August 29.

Hamearis lucina L. (Duke of Burgundy Fritillary). Six, Midger Wood Reserve, Lower Kilcott, June 18.

Thecla betulae L. (Brown Hairstreak). Larvae beaten from Blackthorn Prunus spinosa, Inglestone Common, Nr. Hawkesbury.

Quercosia quercus L. (Purple Hairstreak). Single at Filton, July 20; two, Michael Wood, Nr. Stone, G., July 25 and one, Wetmoor Reserve, Nr. Wickwar, same date; six, Haw Wood, Nr. Hallen, August 2 and one, Compton Bishop, S., August 12.

Strymonidia w-album Knoch. (White Letter Hairstreak). Ten, Long Ashton, July 20; Michael Wood, Nr. Stone, G., July 25 and Haw Wood, Nr. Hallen, July 27.

Callophrys rubi L. (Green Hairstreak). Shute Shelve Hill, Nr. Axbridge, S, May 6; Compton Bishop, S., June 10; three, Midger Wood Reserve, Lower Kilcott, June 18; three, Dolebury Warren, Nr. Churchill, June 24 and a single, Westbury-on-Trym, Bristol, June 2

Cupido minimus Fuessly. (Small Blue). First reported at Charterhouse, Mendip, S, in early June; common, Walton Down, Clevedon, June 18; 30, Uphill, June 9 and 35, same place on 16th with four on August 4; several, Radstock, mid-June; eight, Dolebury Warren, Nr. Churchill, June 24 and 18, Midger Wood Reserve, Lower Kilcott, September 1

Celastrina argiolus L. (Holly Blue). Reported in small numbers throughout the county.

Aricia agestis Schiff. (Brown Argus). Seven, Sand Point, June 13 and five, same place August 11; two, Brockley, June 17; Dolebury Warren, Nr. Churchill, June 24; Goblin Combe, Nr. Cleeve, July 15; disused railway, Congresbury, August 22; two, Burrington Combe, Nr. Burrington, August 27 and ten, Bannerdown, Nr. Bath, same date.

Lysandra coridon Poda.(Chalkhill Blue). Ten, North Nibley,G, July 25; ten, Uphill, August 4 and 11 on 29th; several,Banner Down, Nr. Bath, August 24 but over 50 on 27th; three, Brean Down,S, Aug.26 and last recorded on 29th at Uphill.

Pyrgus malvae L. (Grizzled Skipper). Cheddar Wood, Nr. Axbridge,S, May 6: Compton Bishop,S,May 6 and three, same place, June 10; up to three, Brockley, various dates,June; Midger Wood Reserve, Lower Kilcott, June 18; Filton, June 22 and three, Dolebury Warren, Nr. Churchill, June 24.

Erynnis tages L.(Dingy Skipper). Charterhouse, Mendip,S, June 6 and Uphill, same date; two, Compton Bishop,S, June 10; two, Brockley, June 17 and one, Sand Point, June 17 and July 1; three, Midger Wood Reserve, Lower Kilcott, June 18 and two, Dolebury Warren, Nr. Churchill, June 24.

MOTHS (Lepidopters) by K.H.Poole.

Once again numbers of moths, both of species and individuals, were below average in 1979, and apart from the Silver Y, the only migrant reported was the Humming-bird Hawk-moth. Several rarely reported or vagrant species were recorded, among them - Apamea furva, Hopiodrina ambigua, Lithophane leautieri, Plusia chrysodeixis, Scopula emutaria, and Conopia myopaeformis. Names are in accordance with Kloet and Hincks. A Check List of British Insects, 1977.

Sphinx ligustri L.(Privet Hawk). Several records, including about 150 larvae, Bristol Sept. and Oct.(BSH); larva on Guelder Rose Viburnum opulus, Charterhouse, Mendip,S, Sept.(BSH).

Macroglossum stellatarum (Humming-bird Hawk). Weston-s-Mare, September 4 (JH).

Pseudoips fagana L. (Scarce Silver Lines). Several, Weston-s-Mare, August (CSHB).

Arctia villica L. (Cream-spot Tiger). Two, Brean Down, S, June 24 (RSC).

Callimorpha dominula L(Scarlet Tiger). North Nibley,G,July 25 (ARN).

Atolmis rubricollis L (Red-necked Footman). Weston-s-Mare, July 15 (CSHB).

Acronycta leporina L. (Miller Dagger). Larva, Walton Moor, Nr. Walton-in-Gordano, August 19 (ARN).

Craniophora ligustri Schiff. (Coronet). Knowle, Bristol, August 29 (HKB).

Amphipyra pyramidea L.(Copper Underwing). Leigh Woods, Nr. Bristol, August 27 (GHS).

Apamea characterea Hb.(Clouded Brindle). Coombe Dingle, Bristol, July 2 (HKB).

A.furva Schiff. (The Confused). Weston-s-Mare, July 15 (CSHB).

Hopiodrina ambigua Schiff. (Vine's Rustic). Berrow,S,August 28 (CSHB).

Cosmia pyralina Schiff (Lunar-spotted Pinion). Weston-s-Mare, July 18 (KHP).

Archanara dissoluta Treit.(Brown-veined Wainscot) Berrow,S,August 28 (CSHB).

A.geminipuncta. Haw. (Twin-spotted Wainscot) Berrow,S, (CSHB).

Mythimna obsoleta Hb. (Obscure Wainscot). Several, Berrow,S,July (CSHB).

Lithophane semibrunnea Haw. (Tawny Pinion). Brockley, April 21 (HKB).

L.leautieri Boisd. (Blais Pinion). Weston-s-Mare, October 9 (CSHB). The second record of this species for Weston.

Jaspidia fasciana L (Marbled White Spot). Shapwick,S, June 18 (HKB).

Panemeria tenebrata Scop. (Small Yellow Underwing). Numerous Filton Golf Course, Bristol, June 17 (JFB).

Polychrista moneta Fab. (Golden Plusia). Knowle, Bristol, July 3 (HKB).

P. chrysodeixis (chalcites Esp.) (Gilt Y). Female, Brislington, Bristol, October 10 - eggs laid and moths reared (HKB). First record for the area.

Scopula emutaria Hb. (Rosy Wave). Weston-s-Mare, July 15 (CSHB). First record for Weston-s-Mare, and not recorded in Somerset.

Eupithecia denotata Hb. (Campanula Pug). Larvae, Sandford, August 19 (HKB).

E.tripunctaria H.S.(White-spotted Pug). Knowle, Bristol, June 20 (HKB).

Abraxas sylvata Scop. (Clouded Magpie) Filton, Bristol, June 20 (RA). The only record received for this elm-feeding species.

Plagodis pulveraria L. (Barred Umber). Goblin Combe, June 25 (HKB).

Selenia tetraluparia Hufn. (Purple Thorn). Congresbury, October 12 (GWS).

Deuteronomes fuscantaria Haw. (Dusky Thorn). Knowle, Bristol, September (HKB).

Cepphis advenaria Hb (Little Thorn). Leigh Woods, June 6 (GWS).

Zeuzera pyrina L. (Leopard Moth). Congresbury July 12 (RWR).

Conopia myopaeformis Borkh. (Red Belted Clearwing). Weston-s-Mare, July 7,10 (KHP). Appears to be the first record for Weston and not recorded in Somerset for many years. Further additions to the Congresbury list (RWR and GWS) are Habrosyne pyritoides L (Buff Arches), Philudoria potatoria L. (Drinker Moth), Malacosoma neustria L. (Lackey), Drepana falcataria L. (Pebble Hook-tip)- Nola cuculatella L (Short-cloaked), Phragmatobia fuliginosa L. (Ruby Tiger), Eilema griseola HB (Dingy Footaman) Acronycta megacephala Schiff(Poplar Grey), Diarsia rubi Vieweg. (Small Square-spot), Noctua ianthina Schiff (Lesser Broad Bordered Yellow Underwing), Mythimna ferrago Esp. (Clay), Jodis lactearia L. (Little Emerald), Scopula immutata L. (Lesser Cream Wave), Idaea biselata Hufn (Small Fan-footed Wave), Eulithis mellinata Fab. (Spinach), Electrophaëa corylata Thunb. (Broken-barred Carpet), Anticlea badiata Schiff. (Shoulder Stripe), Eupithecia absinthiata Cl. (Wormwood Pug), Chloroclystis rectangulata L. (Green Pug), Colotois pennaria L. (Feathered Thorn), Crocallis elinguaria L. (Scalloped Oak), Semiothis clathrata L. (Latticed Heath) Aphomia sociella L., Abrostola trigemina Werne. (Spectacle).

This list brings the total number of species recorded at Congresbury since 1975 to 151.

BEETLES (Coleoptera) by R.W. Rowe.

The numbers of observers contributing to the coleoptera records remain disappointingly small and hence the following selection of the more interesting records is not necessarily an indication of the scarcity of these species. Staphylinus olens (Devis's Coach Horse) and Clytus arietus (Wasp Beetle) - two species selected for special attention - were noted in several localities. The Entomological Survey of Leigh Woods (Forestry Commission block) has been in progress since 1976 and 41 species of beetle have been identified. These have been all typical of such a woodland habitat and have, so far, produced no surprises. Again I am indebted to R.S. Cropper for another comprehensive report covering many places in South Avon and adjacent areas of Somerset and to Dr. K.W. Miller for contributing the section on the Coccinellidae.

The nomenclature followed is that of Kloet and Hincks, A Check List of British Insects, Second Edition, Part 3, 1977.

Sermyla halensis L. On grass, Brean Down,S, June 15 (RWR) and Uphill, September 22 also on grass (RSC).

Sinodendron cylindricum L. In rotten ash stump, Weston Woods, Weston-s-Mare, January 1 (GHS).

Staphylinus olens Mull. 35, Weston Woods, Weston-s-Mare, July 27 (GHS).

Dorcus parallelopipedus L. Weston Woods, Weston-s-Mare, July 27 (GHS).

Endomychus coccineus L. In garden, Congresbury, August 27 (RWR).

Dytiscus marginalis L Female, Clarken Coombe round pond, Ashton Court, Bristol, March 21 (RSC), and one in garden, Congresbury, April 16 (GHS).

Lampyris noctiluca L. Three in grass, old railway line, Congresbury, July 10 (RWR).

Attagenus pellio L. Found in house, Congresbury, April 8 and May 15 (RWR).

Meloe violacae Marsh. In grass near Bristol Airport, Lulsgate Bottom, May 5 (GHS).

Enochrus quadripunctatus var. halophilus Bedel. Few in brackish rhine, Kingston Seymour, October 28 (RSC).

Cicindela campestris L. Numerous in wood near Priddy,S, April 15 (ARN).

Phosphuga atrata L. Found beneath stone, Nr. Walton-in-Gordano, June 14 (RSC).

Coccinellidae (Ladybirds)

Records were received from five members and included an account of ladybirds swarming at Uphill, Near Weston-s-Mare supplied by RHP which is of particular interest. Among the species noted were a number of Tytthaspis 16-punctata L(identification confirmed by KWM). This is rather a local species usually confined to marshy areas an not previously noted from Avon since we started to record for the Ladybird Distribution Maps Scheme.

Swarming of ladybirds at Uphill

On August 12 at about noon a large concentration of ladybirds were observed along the river side of the sea wall. It was estimated that there were some 2,000 Coccinell 11-punctata (11-spot ladybird) on the river side of the sea wall and on the dry mud nearby, and especially around two large Spear Thistles which were covered with groups ladybirds, many motionless, but others moving rapidly, especially over the hard mud.

least another 1,000 were on the rough stone field wall and on the nearby blackthorn d bramble hedge. In addition, some 50 larvae were found running about on the stone ll. Along with the C.11-punctata, approximately 50 C.7-punctata (7-spot Ladybird), e Adalia 2-punctata (2-spot Ladybird) and ten Tytthaspis 16-punctata were noted. e weather was recorded as warm and close, being cloudy with sunny intervals and a ght south-westerly breeze.

On a return visit to the same site three days later, after two days of windy ather with heavy rain, ladybirds were still in evidence, although in much smaller mbers and mostly appeared to be dormant. On this occasion, approximately two hundred -spot, ten 7-spot and sixteen Tytthaspia 16-punctata were counted.

SELFLIES AND DRAGONFLIES (Odonata) by A.R. Nichols.

Many fewer records of Odonata were received than in 1978 but it is not certain ether this was due to a scarcity of dragonflies or a reduction in the number of ays in the field by observers. However, I noted that in one particular locality t population of the commoner species was reduced as compared to last year. The s entific and vernacular names are in accordance with the check list given in The Dragonflies of Great Britain and Ireland by Cyril O Hammond (1977) and published by Ca wen Books.

Coenagrion puella L. (Azure Damselfly). Abundant in many places-first noted emerging i numbers, pool near railway, Worle, May 19 (RSC); Canford Park, Westbury-on-Trym, B stol, May 19 (RHP); Leigh Woods (Forestry Commission), July 1 and abundant, D ington, August 4 (RHP); two, Walton Moor, near Walton-in-Gordano, August 19 (ARN).

Ischnura elegans cyathigerum Charpentier (Common Blue Damselfly). Eastwood Park, Nr. F field, June 6 (ARN); abundant, Smitham Hill, Nr. East Harptree, June 17 (RSC); t , Eastwood Park, Nr. Falfield, June 27 (ARN); several, Hallen, July 11 (RHP); C mon, Chew Valley Lake, July 15 (RSC) and abundant, Blagdon Lake, July 22, August 5(RSC).

Pyrrosoma nymphula Sulzer (Large Red Damselfly). Two males, and a female, Eastwood Park, Nr. Falfield, June 1 and mating pair, same place, June 27 (ARN); several, Smitham Hill, Nr. East Harptree, July 15 (RSC).

Ischnura elegans van der Linden (Blue-tailed Damselfly). Abundant many places - first noted emerging, Worle, May 19 (RSC); two males, Eastwood Park, Nr. Falfield, June 27 (ARN) and several, Chew Valley Lake, July 15 (RSC).

Aeshna cyanea Muller (Southern Hawker). Street Heath, between Mere and Street,S, July 21 (RSC); Leigh Woods, (Forestry Commission), Bristol, August 11 (RHP); Brent Knol August 26 (RSC); Henleaze, Bristol, September 22 (RHP) and several, Mudgley, Nr. Wedmore,S, September 25 (RSC).

Aeshna grandis L. (Brown Hawker). Stoke Bishop, Bristol, July 31 (IFG) and two males Dodington, August 8 (RHF).

Aeshna juncea L. (Common Hawker), Stoke Bishop, Bristol, September 13 (IFG).

Aeshna mixta Latreille (Migrant Hawker). Over dunes, Berrow,S, October 21 (RSC).

Anax imperator Leach (Emperor Dragonfly). Eastwood Park, Nr. Falfield, July 10; dunes, Berrow,S, August 4 and Worle, August 12 (RSC)

Brachytron pratense Müller (Hairy Dragonfly), Several, Ashcott Heath, Ashcott, June 20

Orthetrum coerulescens Fab. Keeled Skimmer. Teneral male, Asham Wood, S, July 5 (ARN).

Orthetrum cancellatum L Black-tailed Skimmer. Pair, dunes, Berrow, S, August 4 (RSC).

Libellula depressa L. (Broad-bodied Chaser). Several, Shapwick Heath, Nr. Shapwick,S, June 20 (RSC); teneral male, Michael Wood, Nr. Stone, July 12 (ARN) and several, nature reserve, Street Heath, S, July 15 (RSC).

Libellula quadrimaculata L. (Four-spotted Chaser). Several, Smitham Hill, Nr. East Harptree, June 17 and at Ashcott Heath, Ashcott, S, (RSC).

Sympetrum sanquineum Müller(Ruddy Darter). Recorded by RSC at Blagdon Lake, August 5; and several, same place, on 11th; few, Worle, August 12 and a single, Ashcott Heath, Ashcott,S, September 16.

Sympetrum scoticum Donovan (Black Darter). Male, Priddy pools, Mendip,S, October 13 (- a late date for this species.

ympetrum striolatum Charpentier (Common Darter) Reported as abundant in many known ocalities by RSC who noted this species at the following new sites:- ingston Seymour, Worle, Brean Down,S, and Street Heath between Street and Mere,S. ecords ranged from July 21 to October 28. Other sightings included five at phill, August 12 (RHP); one male and two females, Walton Moor, Nr. Walton-in-Gordano igust 19 (ARN) and a female, Leigh Woods (Forestry Commission), September 2 (RHP).

RICKETS & GRASSHOPPERS (Orthopters) by K.W. Miller.

There were no surprises but as always all records are of value in monitoring the tatus of this group. The following are some of the more interesting records received.

ttigoniidae (Bush Crickets)

ttigonia viridissima L. (Great Green Bush Cricket). Singing males in several places tween Clevedon and Portishead, September 5. One singing at Uphill and another at ington Warren both on September 22 (RSC). Several at Walton Moor, Walton-in-Gordano, gust 12 and again recorded during Ent.Sect.field meeting on the 19th (KWM).

conema thalassinum Dg. (Oak Bush Cricket). Nymph, Blagdon Lake, August 11; Litton servoir, September 30 (RSC) and Walton Moor, Walton-in-Gordano, August 12 (KWM).

olidoptera griseoaptera Dg. (Dark Bush Cricket). On both banks of Avon Gorge, vember 6 (RSC). Common in hedgerows around Claverham and Brockley during September d October, and early November (KWM).

ptophyes punctatissima Box (Speckled Bush Cricket). One, Leigh Woods, (Forestry mmission), Bristol, October 21 (RHP).

atycleis derticulata Pz.(Grey Bush Cricket) Again found in good numbers on Brean wn,S, August 20 (RSC).

ocephalus dorsalis Lat.(Short-winged cone-head). Male, Easton-in-Gordano, August 19. veral beside rhines, Kenn Moor, in August (KWM).

cididae (Grasshoppers)

orthippus albomonginatus Dg.(Lesser Marsh Grasshopper). Plentiful on banks of R. Yeo, ogresbury, September 28 (RSC), Common, Kenn Moor, August and September (KWM).

rigidae (Ground Hoppers)

rix undulata Sow.(Common Ground-Hopper), Worle, August 12 (RSC).

T. subulata L.(Slender Ground-Hopper). Both shores of Blagdon Lake in April. Around Chew Valley Lake July and September (RSC).

TRUE FLIES (Diptera) by R.H. Poulding.

The year was noteworthy for the scarcity of flies in Spring on Salex and other early blossom due to the persistent low temperatures and, in contrast, for the mild autumn which extended the flight period of many tachinids, muscids, syrphids and other families until late November or in some species to early December. Unusual concentrations of hover flies were recorded in several localities in Avon from mid August to late September involving Syrphini sp. whose larvae feed on aphids, and Eristalini sp. which in the larvae stage inhabit mud and stagnant water. Perhaps the most remarkable concentration was on the blossom of Sea Aster (Aster tripolium)growing in profusion along rhe banks of the river in the Avon Gorge where the hover fly population reached a peak in late August of 10-20/square metre of flowering plants. The species selected for special study by the Section - the Gad Fly (Haemotopota pluvialis) and the syrphid Volucella pellucens - were noted in several new 10 km. squa but records were few particularly for the Gad Fly which appears locally scarce in many favourable habitats. The scientific names used are those given in Kloet and Hincks. A Check List of British Insects, Second Edition, Pt.5, 1975.

Chrysops caecutiens L. (Tabanidae - Horse Flies). Two, Walton Moor, Nr. Walton-in-Gordano, August 19 - found on Ent. Sect. field meeting.

Hybomitra bimaculata Macquart (Tabanidae). Female found in window of house, Congresbury, June 11 (GWS) and another Stoke Woods, Rodney Stoke, S, in June (RMP).

Tabanus bromius L. (Tabanidae). Male on tree stump, Congresbury, June 17 (GWS).

Bombylius major L. (Bombyliidae - Bee Flies) Two, Midger Wood, Lower Kilcott, April 17 and one, same date, Henleaze, Bristol (RHP); several on primroses, Nr. Axbridge, May 6 (RSC).

Bombylius discolor Mikan (Bombyliidae). Midger Wood, Lower Kilcott, April 17 (RHP) and several on primroses, edge of path, Cheddar Wood, Nr. Axbridge May 6 (RSC).

te nemea Meigen (Tachinidae). Hatched from moth pupa, Congresbury, Mar.3 (GWS), outhmead, Bristol, April 1 (RHP). This is a common tachinid which parasitises pillars of a wide range of both butterflies and moths.

rcephala planifrons Fab. (Chloropinae). Hatched from pupa found in stem of (Phragmites), Congresbury, May 12 (GWS). A number of reeds contained the al swelling in the stem indicating feeding larvae or pupae of this chloropid.

ella bombylans L. (Syrphidae - Hover Flies). Recorded from Inglestone Common, awkesbury (ARN), Dodington and Shirehampton (RHP).

hina berberina Fab. (Syrphidae). Female, Leigh Woods (Forestry Commission), ol, July 14 and another Nr. Cadbury Camp, Tickenham, July 8 (RHP). This is mon syrphid closely resembling several species of Humble Bees.

dia scita Harris (Syrphidae). Female, swept from low vegetations, Congresbury, 27 (RWR) - an uncommon hover fly in Avon which prefers marshy habitats where the e develop in mud. Has occurred in large numbers at suitable sites in some ern counties.

alis tenax L (Drone Fly - Syrphidae). Large concentration on Michaelmas Daisy r novi-belgii), in marsh, Shirehampton, Bristol, Sept.27, - numbers on the sive tracts of blossom in excess of 10,000. Other Eristalini present included 0 Eoseristalis arbustorum and smaller numbers of E.pertinax and Helophilus pendulus .

BUGS (Hemiptera-Heteroptera) by R.S. Cropper.

One hundred species were recorded from Avon and district in 1979 and special sis was placed on studying the aquatic species. Several of these were confirmed as occurring in sites from which they were first recorded by G.A. Walton in The Water of N. Somerset, Trans. Soc. Brit. Ent., 8, 231-90 (1943). Some of the more interesting ds of both terrestrial and aquatic species are listed below.

Sciocoris cursitans Fab. Plentiful on grassland, Loxton Hill, Nr. Loxton,S, June 9.

Eysarcoris fabricii Kirkaldy. found on Limestone Woundwort (Stachys alpina), Wotton-under-Edge,G, June 26. S.alpina is a rare plant in Britain recorded only fro Gloucestershire and Denbigh. It is closely related to the common Hedge Woundwort (S.sylvatica) which is reported to be the host plant of this bug but it will obviou accept the rarer species.

Dolycoris baccarum L. On mixed vegetations, Sandford Hill, Sandford, May 12.

Rhacognathus punctatus L. On heather, Priddy, S, August 4.

Zicrona caerulea L. In rank grass, Brent Knoll, S, August 26.

Chrosoma schillingi Schumm. Abundant in marram grass, dunes, Berrow, S, July 29.

Berytinus minor (Herrich-Schäffer). Two on Restharrow (Ononis repens), Brent Knol S, August 26.

Gampsocoris punctipes Germ. In short turf, dunes, Berrow, S, July 29.

Dicyphus stachydis Reut. Plentiful on Stachys alpina, Wotton-under-Edge, G, June 26 See remarks under E. fabricii.

Pantilius tunicatus Fab. Several on Hazel, Nr. Barrow Gurney Res., October 7.

Mesovelia furcata Mulsant & Rey. Abundant on floating mats of green algae and lea of Frog-bit (Hydrocharis morsus-ranae) in pool near railway line at Worle, August 1 This is a site from which it was first recorded by Walton and this local species wh may prove more widespread if given closer study.

Gerris argentatus Schumm. Several on pool near railway, Worle, May 19. This is another old record by Walton and the only site at which he found this species in No Somerset.

Corixa affinis Leach. Few in brackish rhine below Brean Down, S, February 25 and also in brackish rhine, Kingston Seymour, October 28.

C.panzeri Fieb. Three, Charterhouse, Mendip,S, March 4 and three, Cheddar Res.,S, 1

t orisa germari Fieb. Plentiful, Blagdon Lake, August 5. Walton recorded it as
i nt at this site which is still true to-day particularly along the north shore.
a concinna Fieb. Five specimens from brackish rhine below Brean Down,S, February
a male, Blagdon Lake, April 15.
s istriata Fieb. In peaty rhine, Nr. Clapton-in-Gordano, February 4.
s gnalis Leach. Abundant in brackish rhine, Kingston Seymour, October 28.

ES, BEES, WASPS, ANTS etc. (Hymenoptera) by G.R. Best.

idae (Ants)
a rufa L. (Wood Ant). No additional localities recorded for this rapidly
ing species. Formerly found in widely separated localities in the district
ilarly along the edges of the Mendip. To complete the proposed distribution
this species all records including negative ones are required.
plae (Gall Wasps)
is quercus-calcis L. 'Knopper' galls on oak caused by this species reported
dye Bay area, Clevedon by KTB. Although widespread on the European mainland,
t appeared in Norfolk in 1969 and has since spread across southern England.
ge, many loped, crinkly gall growths deform the cups causing the acorns to drop
they are ripe.
e (Social Wasps)
a rabro L. (Hornet). No records were received for this species which was
d for special study to determine its present distribution in Avon. Negative
from large forest areas such as Leigh Woods, Bristol suggest that the Hornet is
y scarce or even absent from Avon. Enquiries from local foresters confirm its
from major woodlands and it has not been seen in Leigh Woods for a number of
s. Both old and new records would be of value for this distribution study.
RDERS - EPHEMEROPTA (Mayflies)
is robusta Eaton. Several nymphs in drain, Shapwick Heath, between Shapwick and
, June 20 and Tadham Moor, Nr. Westhay,S, on 21st (RSC). This species was first
d in Britain from Norfolk in 1954, and has been recorded from other counties

since the publication of the description of the nymph. These are the first records for Somerset.

ARACHNOIDEA - SPIDERS AND SCORPIONS

Although it concerns an arachnid and not an insect the following account of a scorpion found in Clifton, Bristol will be of interest to naturalists.

Scorpio italicus (Italian Scorpion). An immature found alive in Broadcasting House, Clifton, May 13, was identified by B. Betts as this species. It was considered to have been accidently introduced into the building from packages received from Italy (J

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